

APPENDIX A

Interacting with the Computer using Speech Input and Speech Output

Note: This documentation is preliminary and is subject to change.

This topic is a basic introduction to the System.Speech namespace in WinFX.

Interacting with the Computer using Speech Input and Speech Output

Humans prefer to communicate with each other using speech, because of its ease of use and expressiveness. Microsoft is extending this metaphor to human-computer interaction. Our goal is to make the use of speech a viable way of interacting with Microsoft Windows. This will primarily benefit those users who rely on assistive technologies to interact with the computer, but is not limited to these users.

In order to achieve this goal, Microsoft is pursuing a two-pronged strategy:

- Enable common speech scenarios out of the box.
- Provide a managed API to customize and extend the speech experience.

In this document we use the terms speech recognition and speech synthesis, which are commonly used in the industry. The popular press sometimes uses the terms voice recognition and voice output to refer to the same technologies.

Overview of Speech Recognition

Speech recognition is the process of converting audio into text. Speech recognition systems are based on algorithms that model human speech, both the sounds that make up a language as well as the word sequences that are commonly used. They use digital signal processing methods and powerful search algorithms to determine the sequence of words the user spoke. The diagram below shows the major components of a speech recognition system.

Conceptual

The acoustic models are provided by the speech recognition sub-system (SR engine). They express the way humans pronounce the basic units of speech (phonemes) in a given language. The SR engine comes pre-configured with models which are averaged over a large set of speakers, male and female, of a given language. In order to get better recognition performance the models are trained on the user's machine. Training is done explicitly via a training wizard, or implicitly by observing the user.

The language model describes in a statistical fashion the likelihood of specific word sequences occurring at a given time. In other words, what is the probability of the word "America" following the words "United States of"? These statistics are determined by analyzing a large collection of written and spoken text. Because of their statistical nature, they are flexible - any word sequence has some, albeit small,

probability of occurring - but lack the rigor required for high recognition accuracy.

Grammars on the other hand explicitly define all the allowable word sequences for a given recognition. They are commonly expressed as context-free grammars (CFGs) or finite-state machines (FSM). While lacking the flexibility of language models - not all word sequences are allowed - they tend to result in higher recognition accuracy. Because they are specific to an application, or an application state, they have to be authored by the application developer or a team member proficient in creating context-free grammars. They can be expressed using a standardized markup language, and/or programmatically through the use of objects in the System.Speech.Srgs namespace.

The following list shows some strengths of speech recognition technology:

- Speech recognition technology is natural. We can express what we want the computer to do rather than breaking a task down into individual steps for mouse or keyboard execution.
- Speech recognition technology is efficient. Most people can talk much faster than they can type.
- Speech recognition technology is good at referring to items that are not on visible on the screen, and so cannot be selected or clicked using the mouse or keyboard.
- Speech recognition technology is flexible. Developers can create parameterized voice macros.

The following list shows some weaknesses of speech for interacting with the computer:

- Speech recognition technology is not effective for fine positioning of the cursor. The mouse or keyboard are much more accurate.
- Using speech recognition technology might result in some lack of privacy. Others in the vicinity can overhear us speaking to a computer.

Overview of Speech Synthesis

Speech synthesis or text-to-speech (TTS) is the process of converting written text into audio. The text (expressed as a basic string that can contain standardized XML-based markup) is normalized by the TTS engine (the text "23" is converted into the words "twenty three") and used to generate a waveform using a particular voice. A voice describes how the basic units of speech are to be realized as waveform fragments, which is concatenated by the TTS engine into a single waveform. Speech Synthesis Markup Language (SSML) can be used to change the prosody of the speech. For example, emphasizing the word tomorrow in the phrase "I want to fly to Seattle tomorrow".

Speech in 'Longhorn'

As mentioned above, Microsoft is taking a two-pronged approach to creating a compelling speech interaction model for Windows:

- the common speech scenarios, like speech-enabling menus and buttons, will be enabled system-wide by Microsoft.
- a comprehensive set of managed APIs that follow the WinFX design guidelines allows the developer to extend the basic functionality with application-specific speech commands and behaviors. For example, providing voice shortcuts for common context-sensitive commands.

The last section of this article provides the code for a Hello World example demonstrating speech recognition and speech synthesis, and a brief description of the important parts of the application.

A Hello World Sample

The main objects performing speech recognition are located in the System.Speech.Recognition namespace, and the main objects performing text-to-speech, are located in the System.Speech.Synthesis namespace. At the top of the sample are two using directives that provide links to these namespaces. Note that there is also a third namespace that deals with grammars, not referenced in this sample, System.Speech.SRGS.

The Hello Word sample is a Windows GUI application, which accounts for the using directive identifying the System.Windows.Forms namespace.

Most of the work in this application occurs in the form's Load event handler. The first statement in the event handler initializes a grammar object. The second statement loads the HelloWorld.grxml file into the grammar object. The grxml file contains XML-formatted text specifying grammar rules that comply with the World Wide Web Consortium Speech Recognition Grammar Specification Version 1.0 (W3C SRGS).

The next statement in the form Load event handler registers an event handler for the Recognition event. The Recognition event is raised in a speech application whenever a successful recognition occurs. In the Hello World sample, find the Recognition event handler right after the form Load event handler. One of the event parameters, the RecognitionEventArgs object, provides data for the Recognition, RejectedRecognition, and Hypothesis events.

Look at this statement in particular: v.Speak("You said" + e.Result.Text);

The Result property in this statement returns a RecognitionResult object, which represents the result of the recognition. The Text property of this object contains a concatenation of the spoken words.

The previous statement in the Recognition event handler created a Voice object, v, and in this statement v uses speech synthesis to speak back the recognized phrase, prefaced by the two words "you said."

Code for the Hello World Sample

```
using System;
using System.Windows.Forms;
using System.Speech.Recognition;
using System.Speech.Synthesis;

namespace Microsoft.Speech.HelloWorld
{
    // SpeechRecognition is a WinForm application
    // that demonstrates basic speech recognition
    // and speech synthesis functionalities
    public class SpeechRecognition : Form
    {
        // The main entry point for the application.
        [STAThread]
        static void Main()
        {
            Application.Run(new SpeechRecognition());
        }

        // Initializes SpeechRecognition form.
    }
}
```

```
public SpeechRecognition()
{
    InitializeComponent();
}

protected override void Dispose( bool disposing )
{
    // Wizard-generated code not shown
}

// Main form load method
private void SpeechRecognition_Load(object sender, EventArgs e)
{
    // Create grammar object that will hold the CFG
    Grammar g = new Grammar();

    // Load SRGS file containing the HelloWorld grammar
    g.Load("HelloWorld.grxml");

    // Set up the recognition event handler
    g.Recognition +=
        new RecognitionEventHandler(RecognitionEvent);

    // Tell the recognizer to start listening for
    // phrases specified in HelloWorld.grxml
    g.IsActive = true;
}

// Speak the text of what was recognized
private void RecognitionEvent(object s, RecognitionEventArgs e)
{
    Voice v = new Voice();
    v.Speak("You said " + e.Result.Text);
}

#region Windows Form Designer generated code
}
```

Conclusion

Microsoft intends to make speech a much more appealing way of interacting with Microsoft Windows. To further that goal, "Longhorn" will support a number of common speech scenarios for free. In addition, "Longhorn" will include a managed API which will allow developers to customize and extend the speech experience. This article provides an introduction to speech technology, and the Speech namespaces in "Longhorn."

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Namespaces

Note: This documentation is preliminary and is subject to change.

The following table lists the namespaces available for WinFX.

[System.Speech.Recognition](#) The following tables list the members exposed by the System.Speech.Recognition namespace.

[System.Speech.Srgs](#) The following tables list the members exposed by the System.Speech.Srgs namespace.

[System.Speech.Synthesis](#) The following tables list the members exposed by the System.Speech.Synthesis namespace.

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System.Speech.Recognition

Note: This documentation is preliminary and is subject to change.

The following tables list the members exposed by the System.Speech.Recognition namespace.

Classes

<u>ActiveCategoryChangedEventArgs</u>	Provides data for the ActiveCategoryChangedEventArgs event.
<u>AudioContentChangedEventArgs</u>	Provides data for the AudioContentChanged event.
<u>BookmarkEventArgs</u>	Provides data for the BookmarkReached event.
<u>Category</u>	Represents a type of recognition of a speech synthesis resource.
<u>CommandRecognitionEventArgs</u>	Provides data for the CommandRecognition event in the Command and CommandSet objects.
<u>DictationGrammar</u>	Contains individual rules and dictation grammars.
<u>DisplayToken</u>	Represents a token, in western languages this is typically a word, that was recognized by the speech recognizer.
<u>DisplayTokenCollection</u>	Represents a collection of recognized tokens.
<u>Grammar</u>	The Grammar class is a logical housing for individual recognition rules and dictation grammars
<u>GrammarCollection</u>	Represents a collection of Grammar objects.
<u>InterferenceEventArgs</u>	Provides data for the Interference event.
<u>LocalRecognizer</u>	This class allows applications to create a private instance of a Recognizer in their own address space.
<u>RecognitionAudio</u>	Contains the audio data and methods for a specific RecognitionResult or a portion of a RecognitionResult.
<u>RecognitionEventArgs</u>	Provides data for the Recognition, RejectedRecognition, and Hypothesis events.
<u>RecognitionPhrase</u>	Represents the phrase that was recognized by the

	recognizer.
<u>RecognitionPhraseAlternate</u>	Contains information about an alternate recognition by the speech recognizer.
<u>RecognitionPhraseAlternateCollection</u>	A collection of alternatives for a specific result.
<u>RecognitionResult</u>	Represents the result when a speech recognizer processes audio and attempts to recognize user speech.
<u>RecognitionRule</u>	Represents the rule that allowed the associated result to be recognized.
<u>RecognitionRuleCollection</u>	Provides a collection of rules.
<u>RecognizeCompletedEventArgs</u>	Provides event arguments for the RecognizeCompleted event.
<u>RecognizeProgressChangedEventArgs</u>	Provides data for the RecognizeProgressChanged event.
<u>RecognizerAttributes</u>	Represents the attributes various speech recognizers may, or may not support.
<u>RecognizerProperties</u>	Represents recognizer properties that are adjustable at runtime.
<u>Recognizers</u>	Represents a collection of speech recognizers.
<u>RecognizerStateChangedEventArgs</u>	Provides data for the RecognizerStateChanged event.
<u>Rule</u>	Represents a grammar rule.
<u>RuleCollection</u>	Represents a collection of Rules.
<u>SemanticProperty</u>	Represents a single semantic property that may contain additional levels of semantic information.
<u>SemanticPropertyCollection</u>	Represents a collection of semantic properties.
<u>SpeechEventArgs</u>	Provides data for these events: NoRecognition, AudioLevelChanged, RecognitionStarted, RecognitionStopped, RecognitionCanceled, RecognitionPaused, and RecognitionResumed.
<u>SpokenToken</u>	Represents a token, in western languages this is typically a word, that was recognized by the speech recognizer.
<u>SpokenTokenCollection</u>	Represents a collection of recognized tokens.
<u>SystemRecognizer</u>	Represents the shared recognizer.
<u>UpdateEventArgs</u>	Provides data for the Update event.

Interfaces

IRecognizer Provides an interface representing a speech recognizer.

Enumerations

AdaptationRelevance Specifies an estimate of the language model data relevance.

<u>AdaptationSettings</u>	Specifies the options to use with the AdaptLanguageModel method to control the language model adaptation process.
<u>AudioContent</u>	Specifies the current audio state.
<u>Confidence</u>	Specifies the various high level confidence values possible for speech recognition.
<u>InterferenceType</u>	Specifies the types of interference in the audio input preventing an optimal speech recognition experience.
<u>LeadingSpace</u>	Specifies how to handle leading space when incorporating RecognitionResult text into surrounding text.
<u>RecognizeMode</u>	Specifies the recognition mode.
<u>RecognizerState</u>	Specifies the current state of the recognizer.
<u>ResultType</u>	Specifies the types of recognition result that can be sent.
<u>TrailingSpace</u>	Specifies how to handle trailing space when incorporating the RecognitionResult's text into surrounding text.

Structures

DictationTopic Represents a dictation topic.

Delegates

<u>ActiveCategoryChangedEventHandler</u>	Represents the method that will handle the ActiveCategoryChangedEventHandler event.
<u>AudioContentChangedEventHandler</u>	Represents the method that will handle the AudioContentChanged event.
<u>BookmarkEventHandler</u>	Represents the method that will handle the Bookmark event.
<u>CommandRecognitionEventHandler</u>	Represents the method that will handle the CommandRecognition event in Command and CommandSet.
<u>InterferenceEventHandler</u>	Represents the method that will handle the InterferenceDetected event.
<u>RecognitionEventHandler</u>	Represents the method that will handle the following events: Recognition, RejectedRecognition, and Hypothesis.
<u>RecognizeCompletedEventHandler</u>	Represents the method that will handle the RecognizeCompleted event.
<u>RecognizeProgressChangedEventHandler</u>	Represents the method that will handle the RecognizeProgressChanged event.
<u>RecognizerStateChangedEventHandler</u>	Represents the method that will handle the RecognizerStateChanged event.
<u>SpeechEventHandler</u>	Represents the method that will handle the following events: NoRecognition, AudioLevelChanged, RecognitionStarted, RecognitionStopped, RecognitionCanceled,

UpdateEventHandler

RecognitionPaused, and RecognitionResumed.
Represents the methods that handle the Updated event and related events.

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ActiveCategoryChangedEventArgs Class

Note: This documentation is preliminary and is subject to change.

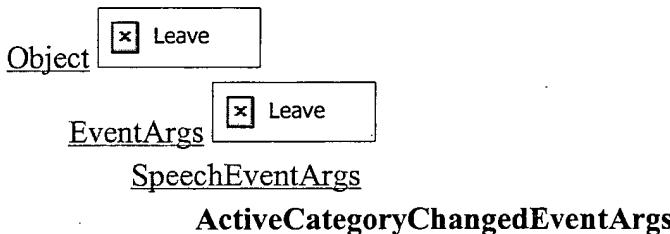
Provides data for the ActiveCategoryChangedEventArgs event.

Definition

```
Visual  Public Class ActiveCategoryChangedEventArgs
Basic   Inherits SpeechEventArgs
C#      public class ActiveCategoryChangedEventArgs : SpeechEventArgs
Managed public __gc
C++     class ActiveCategoryChangedEventArgs : public SpeechEventArgs
JScript  public class ActiveCategoryChangedEventArgs extends SpeechEventArgs
```

Members Table

Inheritance Hierarchy



Class Information

Namespace	System.Speech.Recognition
Assembly	System.Speech (system.speech.dll)
Strong Name	System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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ActiveCategoryChangedEventArgs Method

Note: This documentation is preliminary and is subject to change.

Initializes a new instance of the ActiveCategoryChangedEventArgs class.

Definition

```

Visual Basic   Public Sub ActiveCategoryChangedEventArgs( _
                  ByVal audioPosition As TimeSpan, _
                  ByVal activeCategory As Category _
)
C#           public ActiveCategoryChangedEventArgs(
                  TimeSpan audioPosition,
                  Category activeCategory
);
Managed C++ public: ActiveCategoryChangedEventArgs(
                  TimeSpan audioPosition,
                  Category* activeCategory
);
JScript       public function ActiveCategoryChangedEventArgs(
                  audioPosition : TimeSpan,
                  activeCategory : Category
);

```

Parameters

audioPosition **System.TimeSpan**. Placeholder

activeCategory **System.Speech.Recognition.Category**. Specifies the active category.

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ActiveCategory Property

Note: This documentation is preliminary and is subject to change.

Gets the new active category.

Definition

```

Visual Basic Public ReadOnly Property ActiveCategory As Category
C#           public Category ActiveCategory { get; }
Managed C++ public: __property Category* get_ActiveCategory();
JScript       public function get ActiveCategory() : Category

```

Property Value

System.Speech.Recognition.Category.

This property is read-only.

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AudioContentChangedEventArgs Class

Note: This documentation is preliminary and is subject to change.

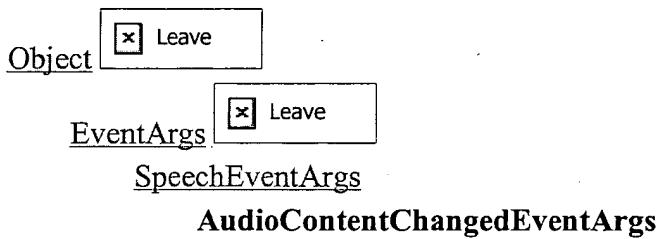
Provides data for the AudioContentChanged event.

Definition

Visual	Public Class AudioContentChangedEventArgs
Basic	Inherits <i>SpeechEventArgs</i>
C#	public class AudioContentChangedEventArgs : <i>SpeechEventArgs</i>
Managed	public __gc
C++	class AudioContentChangedEventArgs : public <i>SpeechEventArgs</i>
JScript	public class AudioContentChangedEventArgs extends <i>SpeechEventArgs</i>

Members Table

Inheritance Hierarchy



Class Information

Namespace	System.Speech.Recognition
Assembly	System.Speech (system.speech.dll)
Strong Name	System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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AudioContentChangedEventArgs Method

Note: This documentation is preliminary and is subject to change.

Initializes a new instance of the `AudioContentChangedEventArgs` class.

Definition

```
Visual Basic  Public Sub AudioContentChangedEventArgs(_
                  ByVal audioPosition As TimeSpan,_
                  ByVal content As AudioContent
)
C#       public AudioContentChangedEventArgs(_
                  TimeSpan audioPosition,_
                  AudioContent content
);
Managed C++ public: AudioContentChangedEventArgs(_
                  TimeSpan audioPosition,_
                  AudioContent content
);
JScript    public function AudioContentChangedEventArgs(_
                  audioPosition : TimeSpan,_
                  content : AudioContent
);
```

Parameters

audioPosition **System.TimeSpan**. Placeholder

content **System.Speech.Recognition.AudioContent**. Updated input audio content.

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Content Property

Note: This documentation is preliminary and is subject to change.

Gets the updated audio content.

Definition

```
Visual Basic Public ReadOnly Property Content As AudioContent
C#       public AudioContent Content { get; }
```

Managed C++ public: __property **AudioContent** get__Content();

JScript public function get **Content()** : **AudioContent**

Property Value

System.Speech.Recognition.AudioContent.

This property is read-only.

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BookmarkEventArgs Class

Note: This documentation is preliminary and is subject to change.

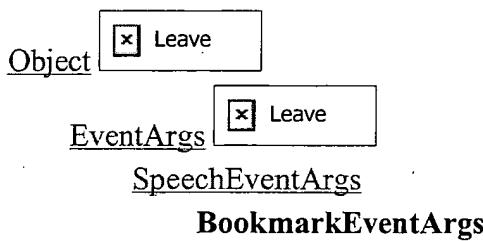
Provides data for the BookmarkReached event.

Definition

```
Visual Basic  Public Class BookmarkEventArgs
                  Inherits SpeechEventArgs
C#          public class BookmarkEventArgs : SpeechEventArgs
Managed C++ public __gc class BookmarkEventArgs : public SpeechEventArgs
JScript     public class BookmarkEventArgs extends SpeechEventArgs
```

Members Table

Inheritance Hierarchy



Class Information

Namespace System.Speech.Recognition
Assembly System.Speech (system.speech.dll)
Strong Name System.Speech, Version=6.0.4044.0, Culture=neutral,
PublicKeyToken=365143bb27e7ac8b

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BookmarkEventArgs Method

Note: This documentation is preliminary and is subject to change.

Initializes a new instance of the BookmarkEventArgs class.

Definition

```
Visual Basic  Public Sub BookmarkEventArgs( _  
                  ByVal audioPosition As TimeSpan, _  
                  ByVal tag As Object _  
                  )  
                  public BookmarkEventArgs(  
                  TimeSpan audioPosition,  
                  object tag  
                  );  
                  public: BookmarkEventArgs(  
                  TimeSpan audioPosition,  
                  Object* tag  
                  );  
                  public function BookmarkEventArgs(  
                  audioPosition : TimeSpan,  
                  tag : Object  
                  );
```

Managed C++

```
JScript
```

Parameters

audioPosition **System.TimeSpan**. Placeholder
tag **System.Object**. Application supplied object reference.

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Tag Property

Note: This documentation is preliminary and is subject to change.

Gets an application-supplied object reference.

Definition

```
Visual Basic  Public ReadOnly Property Tag As Object  
C#          public object Tag { get; }  
Managed C++ public: __property Object* get_Tag();  
JScript     public function get Tag() : Object
```

Property Value

System.Object.

This property is read-only.

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Category Class

Note: This documentation is preliminary and is subject to change.

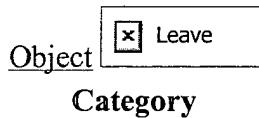
Represents a type of recognition of a speech synthesis resource.

Definition

```
Visual Basic  Public Class Category
                  Inherits Object
C#            public class Category : Object
Managed C++  public __gc class Category : public Object
JScript      public class Category extends Object
```

Members Table

Inheritance Hierarchy



Class Information

Namespace	System.Speech.Recognition
Assembly	System.Speech (system.speech.dll)
Strong Name	System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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Category Method

Note: This documentation is preliminary and is subject to change.

Creates a new Command subcategory.

Overload List

```
public Category()
public Category(Category)
```

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Dispose Method

Note: This documentation is preliminary and is subject to change.

Overload List

```
protected virtual Void Dispose (Boolean)
protected virtual Void Dispose ()
```

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Finalize Method

Note: This documentation is preliminary and is subject to change.

Implements the actions required to destruct an instance of the Category class.

Definition

```
Visual Basic Overrides Protected Sub Finalize()
C# ~Category();
Managed C++ ~Category();
JScript protected override function Finalize() : void;
```

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Command Property

Note: This documentation is preliminary and is subject to change.

Returns the predefined Command category.

Definition

Visual Basic Public Shared ReadOnly Property **Command As Category**

C# public static **Category Command** { get; }

Managed C++ public: __property static **Category* get_Command();**

JScript public static function get **Command()** : **Category**

Property Value

System.Speech.Recognition.Category.

This property is read-only.

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Dictation Property

Note: This documentation is preliminary and is subject to change.

Returns the predefined Dictation category.

Definition

Visual Basic Public Shared ReadOnly Property **Dictation As Category**

C# public static **Category Dictation** { get; }

Managed C++ public: __property static **Category* get_Dictation();**

JScript public static function get **Dictation()** : **Category**

Property Value

System.Speech.Recognition.Category.

This property is read-only.

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Icon Property

Note: This documentation is preliminary and is subject to change.

Gets or sets the icon representing the category.

Definition

Visual Basic Public Property Icon As Icon

C# public Icon Icon { get; set; }

Managed C++ public: __property Icon* get_Icon();
public: __property void set_Icon(Icon*);

JScript public function get Icon() : Icon
 public function set Icon(Icon);

Property Value

System.Drawing.Icon.

This property is read/write.

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IsActive Property

Note: This documentation is preliminary and is subject to change.

Gets or sets a value that specifies whether the category is enabled.

Definition

Visual Basic Public Property IsActive As Boolean

C# public bool IsActive { get; set; }

Managed C++ public: __property bool get_IsActive();
public: __property void set_IsActive(bool);
JScript public function get IsActive() : boolean
 public function set IsActive(boolean);

Property Value

System.Boolean.

This property is read/write.

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IsPrefixRequired Property

Note: This documentation is preliminary and is subject to change.

Gets or sets a value that specifies whether a prefix is required to access grammars associated with the category.

Definition

Visual Basic Public Property IsPrefixRequired As Boolean
C# public bool IsPrefixRequired { get; set; }
Managed C++ public: __property bool get_IsPrefixRequired();
public: __property void set_IsPrefixRequired(bool);
JScript public function get IsPrefixRequired() : boolean
public function set IsPrefixRequired(boolean);

Property Value

System.Boolean.

This property is read/write.

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Name Property

Note: This documentation is preliminary and is subject to change.

Gets or sets the name of the category.

Definition

Visual Basic Public Property Name As String
C# public string Name { get; set; }
Managed C++ public: __property String* get_Name();
public: __property void set_Name(String*);
JScript public function get Name() : String
public function set Name(String);

Property Value

System.String.

This property is read/write.

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Prefix Property

Note: This documentation is preliminary and is subject to change.

Gets or sets the prefix for accessing grammars associated with the category.

Definition

Visual Basic Public Property **Prefix** As String

C# public string **Prefix** { get; set; }

Managed C++ public: __property String* **get_Prefix()**;
public: __property void **set_Prefix(String*)**;

JScript public function **get Prefix()** : String
public function **set Prefix(String)**;

Property Value

System.String.

This property is read/write.

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CommandRecognitionEventArgs Class

Note: This documentation is preliminary and is subject to change.

Provides data for the CommandRecognition event in the Command and CommandSet objects.

Definition

Visual Basic Public Class **CommandRecognitionEventArgs**

Basic Inherits SpeechEventArgs

C# public class **CommandRecognitionEventArgs** : SpeechEventArgs

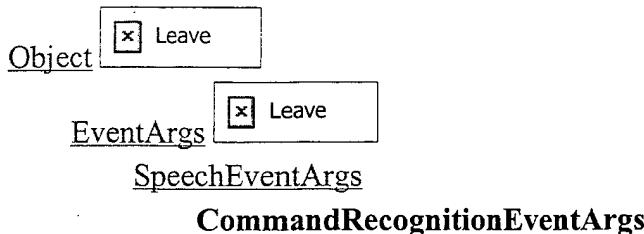
Managed C++ public __gc

class **CommandRecognitionEventArgs** : public SpeechEventArgs

JScript public class **CommandRecognitionEventArgs** extends SpeechEventArgs

Members Table

Inheritance Hierarchy



Class Information

Namespace System.Speech.Recognition
Assembly System.Speech (system.speech.dll)
Strong Name System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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CommandRecognitionEventArgs Method

Note: This documentation is preliminary and is subject to change.

Initializes a new instance of the CommandRecognitionEventArgs class.

Definition

```
Visual Basic Public Sub CommandRecognitionEventArgs()
C#     public CommandRecognitionEventArgs();
Managed C++ public: CommandRecognitionEventArgs();
JScript    public function CommandRecognitionEventArgs();
```

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DictationGrammar Class

Note: This documentation is preliminary and is subject to change.

Contains individual rules and dictation grammars.

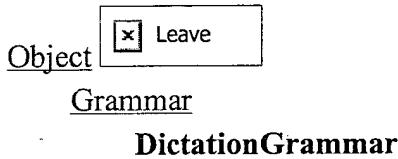
Definition

```
Visual Basic Public Class DictationGrammar
Inherits Grammar
C#     public class DictationGrammar : Grammar
```

Managed C++ public __gc class **DictationGrammar** : public *Grammar*
JScript public class **DictationGrammar** extends *Grammar*

Members Table

Inheritance Hierarchy



Class Information

Namespace System.Speech.Recognition
Assembly System.Speech (system.speech.dll)
Strong Name System.Speech, Version=6.0.4044.0, Culture=neutral,
PublicKeyToken=365143bb27e7ac8b

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DictationGrammar Method

Note: This documentation is preliminary and is subject to change.

Initializes the DictationGrammar class.

Overload List

[public DictationGrammar \(\)](#)
[public DictationGrammar \(IRecognizer\)](#)
[public DictationGrammar \(String\)](#)

Remarks

The Grammar will be assigned to the default GrammarGroup for the specified Recognizer.

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Load Method

Note: This documentation is preliminary and is subject to change.

Loads a grammar from a stream.

Overload List

```
public override Void Load (Stream)
public override Void Load (DictationTopic)
```

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AllowUpdateOnRecognition Property

Note: This documentation is preliminary and is subject to change.

Gets or sets a value that specifies whether the recognition engine temporarily pauses recognition processing while the Recognition event is being processed.

Definition

Visual Basic Overrides Public Property **AllowUpdateOnRecognition As Boolean**

C# public override **bool AllowUpdateOnRecognition { get; set; }**

Managed C++ public: **__property virtual bool get_AllowUpdateOnRecognition();**
public: **__property virtual void set_AllowUpdateOnRecognition(bool);**

JScript public function get **AllowUpdateOnRecognition() : boolean**
public function set **AllowUpdateOnRecognition(boolean);**

Property Value

System.Boolean.

This property is read/write.

Remarks

This is useful if the application wants to change the grammar or stop the recognizer immediately after a recognition result is produced, before the recognizer has processed any additional audio. If you set it to true then very little appears different, but any grammar changes you make during recognition events are synchronous. By default this is false.

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PreceedingText Property

Note: This documentation is preliminary and is subject to change.

Gets or sets text to insert immediately before the current selection in the document.

Definition

Visual Basic Public Property **PreceedingText** As **String**

C# public **string** **PreceedingText** { get; set; }

Managed C++ public: **__property String* get_PreceedingText();**
public: **__property void set_PreceedingText(String*);**

JScript public function get **PreceedingText()** : **String**
public function set **PreceedingText(String)**;

Property Value

System.String.

This property is read/write.

Remarks

This is used by the recognition engine to do more accurate dictation because it knows the words before where the dictation is occurring.

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SelectedText Property

Note: This documentation is preliminary and is subject to change.

Gets or sets selected text in the document.

Definition

Visual Basic Public Property **SelectedText** As **String**

C# public **string** **SelectedText** { get; set; }

Managed C++ public: **__property String* get_SelectedText();**
public: **__property void set_SelectedText(String*);**

JScript public function get **SelectedText()** : **String**
public function set **SelectedText(String)**;

Property Value

System.String.

This property is read/write.

Remarks

This property can be used to inform the engine of any selected text in the document.

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SubsequentText Property

Note: This documentation is preliminary and is subject to change.

Gets or sets text to insert immediately after the current selection in the document.

Definition

Visual Basic	Public Property SubsequentText As <u>String</u>
C#	public <u>string</u> SubsequentText { get; set; }
Managed C++	public: <u>property String*</u> get_SubsequentText() ;
	public: <u>property void set_SubsequentText(String*)</u> ;
JScript	public function get SubsequentText() : <u>String</u>
	public function set SubsequentText(String) ;

Property Value

System.String.

This property is read/write.

Remarks

This is used by the recognition engine to do more accurate dictation because it knows the words after where the dictation is occurring.

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Topic Property

Note: This documentation is preliminary and is subject to change.

Gets the current dictation topic.

Definition

Visual Basic	Public ReadOnly Property Topic As <u>DictationTopic</u>
---------------------	---

```

C#     public DictationTopic Topic { get; }
Managed C++ public: __property DictationTopic get_Topic();
JScript    public function get Topic() : DictationTopic

```

Property Value

System.Speech.Recognition.DictationTopic.

This property is read-only.

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DisplayToken Class

Note: This documentation is preliminary and is subject to change.

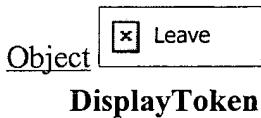
Represents a token, in western languages this is typically a word, that was recognized by the speech recognizer.

Definition

Visual Basic	Public Class DisplayToken Inherits <u>Object</u>
C#	public class DisplayToken : <u>Object</u>
Managed C++	public __gc class DisplayToken : public <u>Object</u>
JScript	public class DisplayToken extends <u>Object</u>

Members Table

Inheritance Hierarchy



Class Information

Namespace	System.Speech.Recognition
Assembly	System.Speech (system.speech.dll)
Strong Name	System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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ToString Method

Note: This documentation is preliminary and is subject to change.

Gets the display text of the token.

Definition

Visual Basic Overrides Public Function **ToString()** As **String**

C# public override **string ToString();**

Managed C++ public: **String* ToString();**

JScript public override function **ToString()** : **String**;

Return Value

System.String.

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Audio Property

Note: This documentation is preliminary and is subject to change.

Gets the captured audio that corresponds to this recognized token.

Definition

Visual Basic Public ReadOnly Property **Audio** As **RecognitionAudio**

C# public **RecognitionAudio** **Audio** { get; }

Managed C++ public: **__property RecognitionAudio* get_Audio();**

JScript public function **get Audio()** : **RecognitionAudio**

Property Value

System.Speech.Recognition.RecognitionAudio.

This property is read-only.

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LeadingSpace Property

Note: This documentation is preliminary and is subject to change.

Gets the leading space requirements for this token.

Definition

Visual Basic Public ReadOnly Property **LeadingSpace** As LeadingSpace

C# public LeadingSpace **LeadingSpace** { get; }

Managed C++ public: __property LeadingSpace get_LeadingSpace();

JScript public function get **LeadingSpace()** : LeadingSpace

Property Value

System.Speech.Recognition.LeadingSpace.

This property is read-only.

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SpokenTokens Property

Note: This documentation is preliminary and is subject to change.

Gets the collection of tokens that that was recognized by the speech recognizer.

Definition

Visual Basic Public ReadOnly Property **SpokenTokens** As SpokenTokenCollection

C# public SpokenTokenCollection **SpokenTokens** { get; }

Managed C++ public: __property SpokenTokenCollection* get_SpokenTokens();

JScript public function get **SpokenTokens()** : SpokenTokenCollection

Property Value

System.Speech.Recognition.SpokenTokenCollection.

This property is read-only.

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Text Property

Note: This documentation is preliminary and is subject to change.

Gets the display text of the token.

Definition

Visual Basic Public ReadOnly Property **Text** As **String**

C# public **string** **Text** { get; }

Managed C++ public: **__property String*** **get_Text()**;

JScript public function **get Text()** : **String**

Property Value

System.String.

This property is read-only.

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TrailingSpace Property

Note: This documentation is preliminary and is subject to change.

Gets the trailing space requirements for this token.

Definition

Visual Basic Public ReadOnly Property **TrailingSpace** As **TrailingSpace**

C# public **TrailingSpace** **TrailingSpace** { get; }

Managed C++ public: **__property TrailingSpace** **get_TrailingSpace()**;

JScript public function **get TrailingSpace()** : **TrailingSpace**

Property Value

System.Speech.Recognition.TrailingSpace.

This property is read-only.

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DisplayTokenCollection Class

Note: This documentation is preliminary and is subject to change.

Represents a collection of recognized tokens.

Definition

Visual Basic Public Class **DisplayTokenCollection**
 Inherits ReadOnlyCollectionBase

C# public class **DisplayTokenCollection** : ReadOnlyCollectionBase

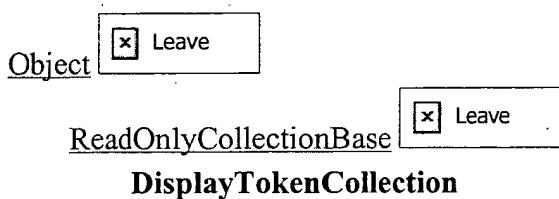
Managed public __gc
 class **DisplayTokenCollection** : public ReadOnlyCollectionBase

C++ class **DisplayTokenCollection** : public ReadOnlyCollectionBase

JScript public class **DisplayTokenCollection** extends ReadOnlyCollectionBase

Members Table

Inheritance Hierarchy



Class Information

Namespace System.Speech.Recognition
Assembly System.Speech (system.speech.dll)
Strong Name System.Speech, Version=6.0.4044.0, Culture=neutral,
 PublicKeyToken=365143bb27e7ac8b

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GetAlternates Method

Note: This documentation is preliminary and is subject to change.

Gets a collection of alternates specified by a range of tokens in the result.

Overload List

public RecognitionPhraseAlternateCollection GetAlternates (Int32, Int32)
public RecognitionPhraseAlternateCollection GetAlternates (Int32, Int32, Int32)

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GetAudio Method

Note: This documentation is preliminary and is subject to change.

Gets the captured audio that corresponds to the specified range of tokens in this collection.

Definition

```
Visual Basic  Public Function GetAudio( _
                  ByVal firstToken As Integer, _
                  ByVal countOfTokens As Integer _
                ) As RecognitionAudio
C#           public RecognitionAudio GetAudio(
                  int firstToken,
                  int countOfTokens
                );
Managed C++  public: RecognitionAudio* GetAudio(
                  int firstToken,
                  int countOfTokens
                );
JScript       public function GetAudio(
                  firstToken : int,
                  countOfTokens : int
                ) : RecognitionAudio;
```

Parameters

firstToken **System.Int32**. The first token to consider
countOfTokens **System.Int32**. The number of tokens to consider

Return Value

System.Speech.Recognition.RecognitionAudio.

An instance of the **RecognitionAudio** class that represents the captured audio

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GetText Method

Note: This documentation is preliminary and is subject to change.

Gets the text that the specified range of tokens represents.

Definition

```

Visual Basic  Public Function GetText(_
    ByVal firstToken As Integer, _
    ByVal countOfTokens As Integer _
) As String
C#        public string GetText(_
    int firstToken,_
    int countOfTokens
);
Managed C++ public: String* GetText(_
    int firstToken,_
    int countOfTokens
);
JScript    public function GetText(_
    firstToken : int,_
    countOfTokens : int
) : String;

```

Parameters

firstToken **System.Int32**. The first token to consider
countOfTokens **System.Int32**. The number of tokens to consider

Return Value

System.String.

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Audio Property

Note: This documentation is preliminary and is subject to change.

Gets the captured audio that corresponds to this collection of recognized tokens.

Definition

```

Visual Basic Public ReadOnly Property Audio As RecognitionAudio
C#        public RecognitionAudio Audio { get; }
Managed C++ public: __property RecognitionAudio* get_Audio();
JScript    public function get Audio() : RecognitionAudio

```

Property Value

System.Speech.Recognition.RecognitionAudio.

This property is read-only.

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Item Property

Note: This documentation is preliminary and is subject to change.

Gets the token at the specified position.

Definition

```
Public ReadOnly Property Item( index As Integer ) As DisplayToken
Visual Basic index As Integer
C# int index
Managed C++ int index
JScript In JScript, you can use indexed properties, but you cannot define your own.
```

Property Value

System.Speech.Recognition.DisplayToken.

This property is read-only.

Parameters

index **System.Int32.**

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LeadingSpace Property

Note: This documentation is preliminary and is subject to change.

Gets the leading space requirements for this fragment of text.

Definition

Visual Basic Public ReadOnly Property **LeadingSpace** As LeadingSpace

C# public LeadingSpace **LeadingSpace** { get; }

Managed C++ public: __property LeadingSpace get_LeadingSpace();

JScript public function get **LeadingSpace()** : LeadingSpace

Property Value

System.Speech.Recognition.LeadingSpace.

This property is read-only.

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Text Property

Note: This documentation is preliminary and is subject to change.

Gets the text that this collection of token represents.

Definition

Visual Basic Public ReadOnly Property **Text** As String

C# public string **Text** { get; }

Managed C++ public: __property String* get_Text();

JScript public function get **Text()** : String

Property Value

System.String.

This property is read-only.

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TrailingSpace Property

Note: This documentation is preliminary and is subject to change.

Gets the trailing space requirements for this fragment of text.

Definition

Visual Basic Public ReadOnly Property **TrailingSpace** As TrailingSpace

C# public TrailingSpace **TrailingSpace** { get; }

Managed C++ public: __property TrailingSpace get_**TrailingSpace**();

JScript public function get **TrailingSpace**() : TrailingSpace

Property Value

System.Speech.Recognition.TrailingSpace.

This property is read-only.

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Grammar Class

Note: This documentation is preliminary and is subject to change.

The Grammar class is a logical housing for individual recognition rules and dictation grammars

Definition

Public Class **Grammar**

Visual Basic Inherits Object

Implements IDisposable

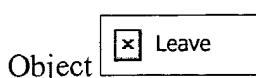
C# public class **Grammar** : Object,
IDisposable

Managed C++ public __gc class **Grammar** : public Object,
IDisposable

JScript public class **Grammar** extends Object
implements IDisposable

Members Table

Inheritance Hierarchy



Grammar

DictationGrammar

SrgsGrammar

Class Information

Namespace System.Speech.Recognition
Assembly System.Speech (system.speech.dll)
Strong Name System.Speech, Version=6.0.4044.0, Culture=neutral,
PublicKeyToken=365143bb27e7ac8b

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Dispose Method

Note: This documentation is preliminary and is subject to change.

Overload List

[protected virtual Void Dispose \(Boolean\)](#)
[protected virtual Void Dispose \(\)](#)

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Finalize Method

Note: This documentation is preliminary and is subject to change.

Releases unmanaged resources and performs other cleanup operations before this instance of the Grammar class is reclaimed by garbage collection.

Definition

Visual Basic Overrides Protected Sub **Finalize()**
C# ~Grammar();
Managed C++ ~Grammar();
JScript protected override function **Finalize()** : **void**;

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Grammar Method

Note: This documentation is preliminary and is subject to change.

Initializes a new instance of the Grammar class.

Overload List

```
public Grammar()  
public Grammar(String)  
public Grammar(IRecognizer)
```

Remarks

The Grammar will be assigned to the default GrammarGroup for the specified Recognizer.

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Load Method

Note: This documentation is preliminary and is subject to change.

Loads a grammar from the specified source URI.

Overload List

```
public virtual void Load(String)  
public virtual void Load(Stream)
```

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AllowUpdateOnRecognition Property

Note: This documentation is preliminary and is subject to change.

Gets or sets a value that specifies whether the recognition engine will pause its recognition processing while the Recognition event is being processed.

Definition

Visual Basic Overridable Public Property **AllowUpdateOnRecognition** As **Boolean**

C# public virtual **bool** **AllowUpdateOnRecognition** { get; set; }

Managed C++ public: __property virtual **bool** get_**AllowUpdateOnRecognition**();
public: __property virtual void set_**AllowUpdateOnRecognition**(**bool**);

JScript public function get **AllowUpdateOnRecognition**() : **boolean**
public function set **AllowUpdateOnRecognition**(**boolean**);

Property Value

System.Boolean.

This property is read/write.

Remarks

Setting this property to true causes the engine to temporarily pause its recognition processing while the Recognition event is being processed. This is useful if the application wants to change the grammar or stop the recognizer immediately after a recognition result is produced, before the recognizer has processed any additional audio. If you set it to true then very little appears different, but any grammar changes you make during recognition events are synchronous. By default this is false.

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BaseUri Property

Note: This documentation is preliminary and is subject to change.

Gets or sets a base URI from which relative paths to rulerefs can be resolved.

Definition

Visual Basic Public Property **BaseUri** As **String**

C# public **string** **BaseUri** { get; set; }

Managed C++ public: **property String* get_BaseUri();**
public: **property void set_BaseUri(String*);**

JScript public function **get BaseUri() : String**
public function **set BaseUri(String);**

Property Value

System.String.

This property is read/write.

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Category Property

Note: This documentation is preliminary and is subject to change.

Gets or sets the category the grammar is associated with.

Definition

Visual Basic Public Property Category As Category

C# public Category Category { get; set; }

Managed C++ public: __property Category* get_ Category();
public: __property void set_ Category(Category*);

JScript public function get Category() : Category
public function set Category(Category);

Property Value

System.Speech.Recognition.Category.

This property is read/write.

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IsActive Property

Note: This documentation is preliminary and is subject to change.

Gets or sets a value that specifies whether the grammar is active or not.

Definition

Visual Basic Public Property IsActive As Boolean

C# public bool IsActive { get; set; }

Managed C++ public: __property bool get_ IsActive();
public: __property void set_ IsActive(bool);

JScript public function get IsActive() : boolean
public function set IsActive(boolean);

Property Value

System.Boolean.

This property is read/write.

Remarks

For a rule to be recognized, it has to be top level, it has to be active, and it has to be housed in an active grammar.

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ListTextBuffer Property

Note: This documentation is preliminary and is subject to change.

Like the TextBuffer, this is used with the <textbuffer> element to allow a user to speak a sub-string of text. This field is different because any sub-string of an array of strings can be spoken.

Definition

Visual Basic Public Property ListTextBuffer As String()
C# public string[] ListTextBuffer { get; set; }
Managed C++ public: __property String* get_ListTextBuffer();
public: __property void set_ListTextBuffer(String*);
JScript public function get ListTextBuffer() : String[]
public function set ListTextBuffer(String[]);

Property Value

System.String.

This property is read/write.

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Name Property

Note: This documentation is preliminary and is subject to change.

Gets or sets the name of a grammar contained in a GrammarGroup or RecognitionResults.

Definition

Visual Basic Public Property Name As String
C# public string Name { get; set; }
Managed C++ public: __property String* get_Name();
public: __property void set_Name(String*);
JScript public function get Name() : String
public function set Name(String);

Property Value

System.String

This property is read/write.

Remarks

Each grammar has a name. This name can be used to identify a grammar in its containing GrammarGroup and in RecognitionResults

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Recognizer Property

Note: This documentation is preliminary and is subject to change.

Gets or sets the speech recognizer that hosts this grammar.

Definition

Visual Basic Public Property **Recognizer** As [IRecognizer](#)

C# public [IRecognizer](#) **Recognizer** { get; set; }

Managed C++ public: [__property IRecognizer*](#) **get_Recognizer()**;
public: [__property void set_Recognizer\(IRecognizer*\)](#);

JScript public function **get Recognizer()** : [IRecognizer](#)
public function **set Recognizer(IRecognizer)**;

Property Value

[System.Speech.Recognition.IRecognizer](#).

This property is read/write.

Remarks

If a recognizer is not already set when the property's get accessor is called, a new recognizer will be created.

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RootRule Property

Note: This documentation is preliminary and is subject to change.

Gets the root rule of the grammar.

Definition

Visual Basic Public ReadOnly Property **RootRule** As Rule

C# public Rule **RootRule** { get; }

Managed C++ public: __property Rule* get_RootRule();

JScript public function get RootRule() : Rule

Property Value

System.Speech.Recognition.Rule.

This property is read-only.

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SharingUri Property

Note: This documentation is preliminary and is subject to change.

Gets or sets a name to use in ruleref when referencing this grammar from other grammars.

Definition

Visual Basic Public Property **SharingUri** As String

C# public string **SharingUri** { get; set; }

Managed C++ public: __property String* get_SharingUri();

public: __property void set_SharingUri(String*);

JScript public function get SharingUri() : String

public function set SharingUri(String);

Property Value

System.String.

This property is read/write.

Remarks

Setting this property allows grammars that are dynamically built or edited to be referenced in ruleref.

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TextBuffer Property

Note: This documentation is preliminary and is subject to change.

Gets or sets the text from which a sub-range can be selected.

Definition

Visual Basic Public Property **TextBuffer** As String

C# public string **TextBuffer** { get; set; }

Managed C++ public: __property String* **get_TextBuffer()**;
public: __property void **set_TextBuffer(String*)**;

JScript public function **get TextBuffer()** : String
public function **set TextBuffer(String)**;

Property Value

System.String.

This property is read/write.

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TopLevelRules Property

Note: This documentation is preliminary and is subject to change.

Gets the collection of rules contained by this instance of the Grammar class.

Definition

Visual Basic Public ReadOnly Property **TopLevelRules** As RuleCollection

C# public RuleCollection **TopLevelRules** { get; }

Managed C++ public: __property RuleCollection* **get_TopLevelRules()**;

JScript public function **get TopLevelRules()** : RuleCollection

Property Value

System.Speech.Recognition.RuleCollection.

This property is read-only.

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Hypothesis Event

Note: This documentation is preliminary and is subject to change.

Occurs when a spoken phrase is partially recognized.

Definition

Visual Basic Public Event **Hypothesis** As *RecognitionEventHandler*

C# public event *RecognitionEventHandler* **Hypothesis**;

Managed C++ public: __event **Hypothesis**;

JScript In JScript, you can use events, but you cannot define your own.

Remarks

The application may use this event to display intermediate recognition results to the user.

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NoRecognition Event

Note: This documentation is preliminary and is subject to change.

Occurs when a spoken phrase is not recognized.

Definition

Visual Basic Public Event **NoRecognition** As *RecognitionEventHandler*

C# public event *RecognitionEventHandler* **NoRecognition**;

Managed C++ public: __event **NoRecognition**;

JScript In JScript, you can use events, but you cannot define your own.

Remarks

Handle this event to indicate to the user that the spoken phrase was unrecognized. The Result object in the event args will be null.

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Recognition Event

Note: This documentation is preliminary and is subject to change.

Occurs when a spoken phrase is successfully recognized.

Definition

Visual Basic Public Event **Recognition** As *RecognitionEventHandler*

C# public event *RecognitionEventHandler* **Recognition**;

Managed C++ public: __event **Recognition**;

JScript In JScript, you can use events, but you cannot define your own.

Remarks

The audio position and recognition result can be accessed through the *RecognitionEventArgs* parameter.

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RejectedRecognition Event

Note: This documentation is preliminary and is subject to change.

Occurs when a spoken phrase is recognized with low confidence.

Definition

Visual Basic Public Event **RejectedRecognition** As *RecognitionEventHandler*

C# public event *RecognitionEventHandler* **RejectedRecognition**;

Managed C++ public: __event **RejectedRecognition**;

JScript In JScript, you can use events, but you cannot define your own.

Remarks

The application should confirm the recognition result with the user before processing this event as a successful recognition. The audio position and recognition result can be accessed through the *RecognitionEventArgs* parameter.

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GrammarCollection Class

Note: This documentation is preliminary and is subject to change.

Represents a collection of Grammar objects.

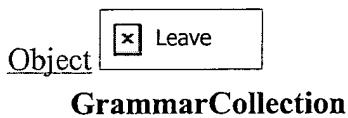
Definition

Public Class **GrammarCollection**

Visual Basic	Inherits <i>Object</i> Implements <i>ICollection</i> , <i>IEnumerable</i> , <i>IList</i>
C#	public class GrammarCollection : <i>Object</i> , <i>ICollection</i> , <i>IEnumerable</i> , <i>IList</i>
Managed C++	public __gc class GrammarCollection : public <i>Object</i> , <i>ICollection</i> , <i>IEnumerable</i> , <i>IList</i>
JScript	public class GrammarCollection extends <i>Object</i> implements <i>IList</i> , <i>ICollection</i> , <i>IEnumerable</i>

Members Table

Inheritance Hierarchy



Class Information

Namespace System.Speech.Recognition
Assembly System.Speech (system.speech.dll)
Strong Name System.Speech, Version=6.0.4044.0, Culture=neutral,
PublicKeyToken=365143bb27e7ac8b

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Add Method

Note: This documentation is preliminary and is subject to change.

Adds a new Grammar with the specified name to the collection.

Overload List

```
public Grammar Add (String)
public Grammar Add ()
public Grammar Add (Grammar)
```

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Clear Method

Note: This documentation is preliminary and is subject to change.

Removes all objects from the collection.

Definition

```
Visual Basic Public Sub Clear()
C#     public void Clear();
Managed C++ public: void Clear();
JScript   public function Clear() : void;
```

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Contains Method

Note: This documentation is preliminary and is subject to change.

Determines whether the collection contains a specific grammar.

Definition

```
Public Function Contains(
Visual Basic   ByVal grammar As Grammar
                  ) As Boolean
C#           public bool Contains(
                           Grammar grammar
                           );
           public: bool Contains(
Managed C++   Grammar* grammar
                           );
           public function Contains(
JScript      grammar : Grammar
                           ) : boolean;
```

Parameters

grammar **System.Speech.Recognition.Grammar**. The grammar to locate in the collection.

Return Value

System.Boolean. True if the grammar is found in the collection; otherwise, false.

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CopyTo Method

Note: This documentation is preliminary and is subject to change.

Copies the elements of the collection to an array, starting at the specified index in the array.

Definition

```
Public Sub CopyTo( array As Array, index As Integer )  
Visual Basic  
public void CopyTo(  
C#  
    Array array,  
    int index  
);  
public: void CopyTo(  
Managed C++  
    Array* array,  
    int index  
);  
public function CopyTo(  
JScript  
    array : Array,  
    index : int  
) : void;
```

Parameters

array **System.Array**. The one-dimensional array that is the destination of the elements copied from the collection. The array must have zero-based indexing.

index **System.Int32**. The zero-based index in the array at which copying begins.

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GetEnumerator Method

Note: This documentation is preliminary and is subject to change.

Returns a System.Collections.IEnumerator-implemented object that contains all Grammar objects within the GrammarCollection.

Definition

```
Visual Basic Public Function GetEnumerator() As IEnumerator
C#     public IEnumerator GetEnumerator();
Managed C++ public: IEnumerator* GetEnumerator();
JScript    public function GetEnumerator() : IEnumerator;
```

Return Value

System.Collections.IEnumerator.

A System.Collections.IEnumerator-implemented object that contains all Grammar objects within the GrammarCollection.

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IList.Add Method

Note: This documentation is preliminary and is subject to change.

Definition

```
Private Function IList.Add(_
Visual Basic   ByVal value As Object _
                  ) As Integer
                  private int IList.Addobject value
                  );
                  private: int IList.AddObject* value
                  );
                  private function IList.Addvalue : Object
                  ) : int;
```

Parameters

value **System.Object.**

Return Value

System.Int32.

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IList.Contains Method

Note: This documentation is preliminary and is subject to change.

Definition

```
Private Function IList.Contains(  
    Visual Basic    ByVal value As Object _  
    ) As Boolean  
    C#        private bool ILList.Contains(  
        object value  
        );  
        private: bool ILList.Contains(  
    Managed C++    Object* value  
    );  
    private function ILList.Contains(  
    JScript        value : Object  
    ): boolean;
```

Parameters

value **System.Object.**

Return Value

System.Boolean.

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IList.IndexOf Method

Note: This documentation is preliminary and is subject to change.

Definition

```

Visual Basic  Private Function IList.IndexOf(_
    ByVal value As Object _
) As Integer
C#    private int IList.IndexOf(_
        object value
);
    private: int IList.IndexOf(_
Managed C++  Object* value
);
    private function IList.IndexOf(_
JScript      value : Object
) : int;

```

Parameters

value **System.Object**.

Return Value

System.Int32.

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IList.Insert Method

Note: This documentation is preliminary and is subject to change.

Definition

```

Visual Basic  Private Sub IList.Insert(_
    ByVal index As Integer, _
    ByVal value As Object _
)
    private void IList.Insert(_
        int index,
        object value
);
    private: void IList.Insert(_
Managed C++  int index,
JScript      Object* value
);
    private function IList.Insert(_
        index : int,
        value : Object
) : void;

```

Parameters

index **System.Int32**.
value **System.Object**.

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IList.Remove Method

Note: This documentation is preliminary and is subject to change.

Definition

```
Private Sub IList.Remove(  
    Visual Basic    ByVal value As Object _  
    )  
    C#        object value  
    );  
    private: void IList.Remove(  
    Managed C++    Object* value  
    );  
    JScript        value : Object  
    ) : void;
```

Parameters

value **System.Object**.

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IndexOf Method

Note: This documentation is preliminary and is subject to change.

Determines the index of a specific grammar in the collection.

Definition

```
Visual Basic Public Function IndexOf(  
    grammar As Grammar _
```

```

) As Integer
public int IndexOf(
    Grammar grammar
);
public: int IndexOf(
    Grammar* grammar
);
public function IndexOf(
    grammar : Grammar
) : int;

```

Parameters

grammar **System.Speech.Recognition.Grammar**. The grammar to locate in the collection.

Return Value

System.Int32. The index of grammar if found in the collection; otherwise, -1.

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Insert Method

Note: This documentation is preliminary and is subject to change.

Inserts a grammar into the collection at the specified position.

Definition

```

Public Sub Insert(
    ByVal index As Integer,
    ByVal grammar As Grammar
)
public void Insert(
    int index,
    Grammar grammar
);
public: void Insert(
    int index,
    Grammar* grammar
);
public function Insert(
    index : int,
    grammar : Grammar
)

```

```
) : void;
```

Parameters

index **System.Int32**. The zero-based index at which grammar should be inserted.
grammar **System.Speech.Recognition.Grammar**. The grammar to insert into the collection.

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Remove Method

Note: This documentation is preliminary and is subject to change.

Removes the first occurrence of the specified grammar from the collection.

Definition

```
Public Sub Remove(  
    Visual Basic    ByVal grammar As Grammar  
    )  
    public void Remove(  
        C#            Grammar grammar  
        );  
        public: void Remove(  
            Managed C++ Grammar* grammar  
            );  
            public function Remove(  
                JScript        grammar : Grammar  
                ) : void;
```

Parameters

grammar **System.Speech.Recognition.Grammar**. The grammar to remove from the collection.

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RemoveAt Method

Note: This documentation is preliminary and is subject to change.

Removes the specified item from the collection.

Definition

```
Public Sub RemoveAt(  
Visual Basic    ByVal index As Integer  
    )  
    public void RemoveAt(  
C#        int index  
    );  
    public: void RemoveAt(  
Managed C++    int index  
    );  
    public function RemoveAt(  
JScript        index : int  
    ) : void;
```

Parameters

index **System.Int32**. The zero-based index of the item to remove.

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Count Property

Note: This documentation is preliminary and is subject to change.

Gets the number of items in this collection.

Definition

```
Visual Basic  Public ReadOnly Property Count As Integer  
C#        public int Count { get; }  
Managed C++ public: __property int get_Count();  
JScript      public function get Count() : int
```

Property Value

System.Int32.

This property is read-only.

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IsFixedSize Property

Note: This documentation is preliminary and is subject to change.

Gets a value that specifies whether the collection has a fixed size.

Definition

Visual Basic Public ReadOnly Property **IsFixedSize** As **Boolean**

C# public **bool** **IsFixedSize** { get; }

Managed C++ public: __property **bool** get_**IsFixedSize**();

JScript public function get **IsFixedSize()** : **boolean**

Property Value

System.Boolean.

This property is read-only.

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IsReadOnly Property

Note: This documentation is preliminary and is subject to change.

Gets a value that specifies whether the collection is read-only.

Definition

Visual Basic Public ReadOnly Property **IsReadOnly** As **Boolean**

C# public **bool** **IsReadOnly** { get; }

Managed C++ public: __property **bool** get_**IsReadOnly**();

JScript public function get **IsReadOnly()** : **boolean**

Property Value

System.Boolean.

This property is read-only.

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IsSynchronized Property

Note: This documentation is preliminary and is subject to change.

Gets a value indicating whether access to the collection is thread-safe.

Definition

Visual Basic Public ReadOnly Property **IsSynchronized** As Boolean

C# public bool **IsSynchronized** { get; }

Managed C++ public: __property bool get_**IsSynchronized**();

JScript public function get **IsSynchronized**() : boolean

Property Value

System.Boolean.

This property is read-only.

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Item Property

Note: This documentation is preliminary and is subject to change.

Gets or sets the Grammar at the specified index.

Definition

Public Property **Item**(

Visual Basic ByVal *index* As Integer _
) As Grammar

public Grammar **this[**

C# int *index*

] { get; set; }

public: __property Grammar* **get_Item**(
 int *index*
);

Managed C++ public: __property void **set_Item**(

int *index*,

Grammar*

);

JScript In JScript, you can use indexed properties, but you cannot define your own.

Property Value

System.Speech.Recognition.Grammar.

This property is read/write.

Parameters

index **System.Int32.**

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SyncRoot Property

Note: This documentation is preliminary and is subject to change.

Gets an object that can be used to synchronize access to the collection.

Definition

Visual Basic Public ReadOnly Property **SyncRoot** As Object
C# public object **SyncRoot** { get; }
Managed C++ public: __property Object* get_**SyncRoot**();
JScript public function get **SyncRoot()** : Object

Property Value

System.Object.

This property is read-only.

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InterferenceEventArgs Class

Note: This documentation is preliminary and is subject to change.

Provides data for the Interference event.

Definition

Visual Basic Public Class **InterferenceEventArgs**
Inherits SpeechEventArgs

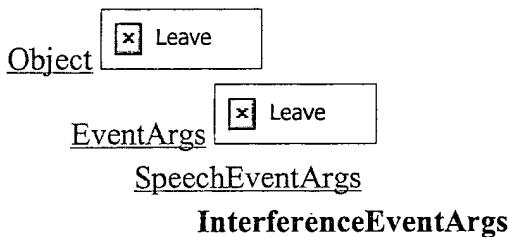
```

C#     public class InterferenceEventArgs : SpeechEventArgs
Managed C++ public __gc class InterferenceEventArgs : public SpeechEventArgs
JScript   public class InterferenceEventArgs extends SpeechEventArgs

```

Members Table

Inheritance Hierarchy



Class Information

Namespace System.Speech.Recognition
Assembly System.Speech (system.speech.dll)
Strong Name System.Speech, Version=6.0.4044.0, Culture=neutral,
PublicKeyToken=365143bb27e7ac8b

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InterferenceEventArgs Method

Note: This documentation is preliminary and is subject to change.

Initializes a new instance of the **InterferenceEventArgs** class.

Definition

```

Visual Basic   Public Sub InterferenceEventArgs(_
                  ByVal audioPosition As TimeSpan,_
                  ByVal interference As InterferenceType_
)
C#           public InterferenceEventArgs(_
                  TimeSpan audioPosition,_
                  InterferenceType interference
);
Managed C++ public: InterferenceEventArgs(_
                  TimeSpan audioPosition,_
                  InterferenceType interference
);

```

```
JScript    public function InterferenceEventArgs(  
           audioPosition : TimeSpan,  
           interference : InterferenceType  
           );
```

Parameters

audioPosition **System.TimeSpan**. Placeholder
interference **System.Speech.Recognition.InterferenceType**. Interference event type.

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Interference Property

Note: This documentation is preliminary and is subject to change.

Gets the interference type.

Definition

Visual Basic Public ReadOnly Property **Interference** As InterferenceType
C# public InterferenceType **Interference** { get; }
Managed C++ public: __property InterferenceType get_ **Interference**();
JScript public function get **Interference**() : InterferenceType

Property Value

System.Speech.Recognition.InterferenceType.

This property is read-only.

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LocalRecognizer Class

Note: This documentation is preliminary and is subject to change.

This class allows applications to create a private instance of a Recognizer in their own address space.

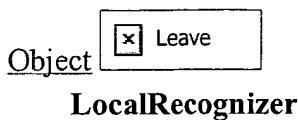
Definition

Public Class **LocalRecognizer**

Visual Basic	Inherits <i>Object</i> Implements <i>IDisposable</i> , <i>IRecognizer</i>
C#	public class LocalRecognizer : <i>Object</i> , <i>IDisposable</i> , <i>IRecognizer</i>
Managed C++	public __gc class LocalRecognizer : public <i>Object</i> , <i>IDisposable</i> , <i>IRecognizer</i>
JScript	public class LocalRecognizer extends <i>Object</i> implements <i>IRecognizer</i> , <i>IDisposable</i>

Members Table

Inheritance Hierarchy



Remarks

Unlike the **SystemRecognizer** which is shared with other processes on the system, the **LocalRecognizer** is totally under the control of the process that creates it.

Each instance of the **LocalRecognizer** class represents a single recognition engine. The application can connect to each recognition engine one or more recognition contexts, from which the application can control the recognition grammars to be used, start and stop recognition, and receive events and recognition results. A standard application may not need to call many of the methods on this class as the default settings are likely satisfactory.

Class Information

Namespace	System.Speech.Recognition
Assembly	System.Speech (system.speech.dll)
Strong Name	System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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AdaptLanguageModel Method

Note: This documentation is preliminary and is subject to change.

Passes a block of text to the recognition engine which can be used to adapt the active language models.

Overload List

```
public Void AdaptLanguageModel (String)
public Void AdaptLanguageModel (String[])
public Void AdaptLanguageModel (String, String, AdaptationSettings, AdaptationRelevance)
public Void AdaptLanguageModel (String
[], String, AdaptationSettings, AdaptationRelevance)
```

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CancelRecognizeAsync Method

Note: This documentation is preliminary and is subject to change.

Cancels the currently executing asynchronous operation. If no asynchronous operation is currently executing, nothing happens.

Definition

```
Visual Basic Public Sub CancelRecognizeAsync()
C#     public void CancelRecognizeAsync();
Managed C++ public: void CancelRecognizeAsync();
JScript     public function CancelRecognizeAsync() : void;
```

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Dispose Method

Note: This documentation is preliminary and is subject to change.

Releases SAPI resources.

Definition

```
Visual Basic Public Sub Dispose()
C#     public void Dispose();
Managed C++ public: void Dispose();
JScript     public function Dispose() : void;
```

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EmulateRecognize Method

Note: This documentation is preliminary and is subject to change.

Simulates a speech recognition event by assuming the specified text was spoken.

Overload List

```
public Void EmulateRecognize (String)
public Void EmulateRecognize (String, CompareOptions)
public Void EmulateRecognize (String[])
public Void EmulateRecognize (String[], CompareOptions)
```

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InsertBookmark Method

Note: This documentation is preliminary and is subject to change.

Sets a bookmark at a particular stream position.

Definition

```
Visual Basic   Public Sub InsertBookmark(
                  ByVal streamTimeToDoBookmark As TimeSpan,
                  ByVal tag As Object
)
C#           public void InsertBookmark(
                  TimeSpan streamTimeToDoBookmark,
                  object tag
);
Managed C++  public: void InsertBookmark(
                  TimeSpan streamTimeToDoBookmark,
                  Object* tag
);
JScript       public function InsertBookmark(
                  streamTimeToDoBookmark : TimeSpan,
                  tag : Object
) : void;
```

Parameters

streamTimeToDoBookmark System.TimeSpan.
tag System.Object.

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InsertBookmarkAhead Method

Note: This documentation is preliminary and is subject to change.

Sets a bookmark at a particular time ahead of the current audio position.

Definition

```
Public Sub InsertBookmarkAhead( timeAheadToDoBookmark As TimeSpan, tag As Object )  
Visual Basic  
C#  
public void InsertBookmarkAhead(  
    TimeSpan timeAheadToDoBookmark,  
    object tag  
);  
public: void InsertBookmarkAhead(  
    TimeSpan timeAheadToDoBookmark,  
    Object* tag  
);  
public function InsertBookmarkAhead(  
    timeAheadToDoBookmark : TimeSpan,  
    tag : Object  
) : void;  
Managed C++  
JScript
```

Parameters

timeAheadToDoBookmark **System.TimeSpan**.
tag **System.Object**.

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LocalRecognizer Method

Note: This documentation is preliminary and is subject to change.

Creates a new default LocalRecognizer.

Overload List

[public LocalRecognizer \(\)](#)

```
public LocalRecognizer (RecognizerAttributes)
public LocalRecognizer (CultureInfo Class)
public LocalRecognizer (String)
```

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Recognize Method

Note: This documentation is preliminary and is subject to change.

Begins synchronous recognition, which terminates when a phrase has been recognized or after timeout.

Overload List

```
public RecognitionResult Recognize ()
public RecognitionResult Recognize (RecognizeMode)
```

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RecognizeAsync Method

Note: This documentation is preliminary and is subject to change.

Begins asynchronous recognition. Calling RecognizeAsync() while a previous RecognizeAsync() is still executing will block until the previous operation completes.

Overload List

```
public Void RecognizeAsync ()
public Void RecognizeAsync (RecognizeMode)
```

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RequestUpdate Method

Note: This documentation is preliminary and is subject to change.

Requests an update as soon as the engine can accept it. The system will fire the Update event once the recognizer is ready to receive updates.

Overload List

```
public Void RequestUpdate()
public Void RequestUpdate (Object)
public Void RequestUpdate (TimeSpan, Object)
```

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RequestUpdateAhead Method

Note: This documentation is preliminary and is subject to change.

Requests an update as soon as the engine can accept it. The system will fire the Update event once the recognizer is ready to receive updates.

Definition

```
Visual Basic  Public Sub RequestUpdateAhead( _
                  ByVal timeAheadToDoUpdate As TimeSpan, _
                  ByVal tag As Object)
                  )

C#    public void RequestUpdateAhead(
                  TimeSpan timeAheadToDoUpdate,
                  object tag
                  );

Managed C++ public: void RequestUpdateAhead(
                  TimeSpan timeAheadToDoUpdate,
                  Object* tag
                  );

JScript    public function RequestUpdateAhead(
                  timeAheadToDoUpdate : TimeSpan,
                  tag : Object
                  ) : void;
```

Parameters

timeAheadToDoUpdate **System.TimeSpan**.
tag **System.Object**.

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StopRecognizeAsync Method

Note: This documentation is preliminary and is subject to change.

Stops the asynchronous recognition operation for Single and Multiple recognition modes.

Definition

```
Visual Basic Public Sub StopRecognizeAsync()  
C#     public void StopRecognizeAsync();  
Managed C++ public: void StopRecognizeAsync();  
JScript   public function StopRecognizeAsync() : void;
```

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WaitForUpdate Method

Note: This documentation is preliminary and is subject to change.

Waits until the engine is ready to perform an update. The system will fire the Update event once the recognizer is ready to receive updates. This call will block until after this event is processed.

Definition

```
Visual Basic Public Sub WaitForUpdate()  
C#     public void WaitForUpdate();  
Managed C++ public: void WaitForUpdate();  
JScript   public function WaitForUpdate() : void;
```

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Attributes Property

Note: This documentation is preliminary and is subject to change.

Gets the attributes of the recognizer.

Definition

```
Visual Basic Public ReadOnly Property Attributes As RecognizerAttributes  
C#     public RecognizerAttributes Attributes { get; }  
Managed C++ public: __property RecognizerAttributes* get_Attributes();  
JScript   public function get Attributes() : RecognizerAttributes
```

Property Value

System.Speech.Recognition.RecognizerAttributes.

This property is read-only.

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AudioContent Property

Note: This documentation is preliminary and is subject to change.

Gets the audio input received by the recognizer.

Definition

Visual Basic Public ReadOnly Property AudioContent As AudioContent

C# `public AudioContent AudioContent { get; }`

Managed C++ public: __property AudioContent get_AudioContent();

JScript public function get AudioContent(): AudioContent

Property Value

System.Speech.Recognition.AudioContent.

This property is read-only.

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AvailableRecognizers Property

Note: This documentation is preliminary and is subject to change.

Gets the attributes of all the recognizers that are installed on the system

Definition

Visual Basic Public Shared ReadOnly Property **AvailableRecognizers** As **Recognizers**

```
C#     public static Recognizers AvailableRecognizers { get; }
```

Managed C++ public: __property static **Recognizers*** get_AvailableRecognizers();

JScript public static function get AvailableRecognizers() : Recognizers

Property Value

System.Speech.Recognition.Recognizers.

This property is read-only.

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BabbleTimeout Property

Note: This documentation is preliminary and is subject to change.

Specifies the maximum time that is allowed for an utterance or recording.

Definition

Visual Basic Public Property **BabbleTimeout** As **TimeSpan**

C# public **TimeSpan** **BabbleTimeout** { get; set; }

Managed C++ public: __property **TimeSpan** get_**BabbleTimeout**();
public: __property void set_**BabbleTimeout**(**TimeSpan**);

JScript public function get **BabbleTimeout**() : **TimeSpan**
public function set **BabbleTimeout**(**TimeSpan**);

Property Value

System.TimeSpan.

This property is read/write.

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EnableRejection Property

Note: This documentation is preliminary and is subject to change.

Gets or sets a value that specifies whether the Recognizer splits Recognitions into those that it is confident are correct (Recognition events), and those it is not (RejectedRecognition events). Otherwise all recognitions raise Recognition events. By default this is set to true.

Definition

Visual Basic Public Property **EnableRejection** As **Boolean**

C# public **bool** **EnableRejection** { get; set; }

```
Managed C++ public: __property bool get_EnableRejection();
public: __property void set_EnableRejection(bool);
JScript     public function get EnableRejection() : boolean
public function set EnableRejection(boolean);
```

Property Value

System.Boolean.

This property is read/write.

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Grammars Property

Note: This documentation is preliminary and is subject to change.

Gets the collection of available grammars.

Definition

Visual Basic Public ReadOnly Property **Grammars** As GrammarCollection

C# public GrammarCollection Grammars { get; }

Managed C++ public: __property GrammarCollection* get_Grammars();

JScript public function get Grammars() : GrammarCollection

Property Value

System.Speech.Recognition.GrammarCollection.

This property is read-only.

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InitialSilenceTimeout Property

Note: This documentation is preliminary and is subject to change.

Gets or sets the time the recognizer allows between when the microphone is turned on, and recognition starts.

Definition

Visual Basic Public Property **InitialSilenceTimeout** As **TimeSpan**

C# public **TimeSpan** **InitialSilenceTimeout** { get; set; }

Managed C++ public: **property TimeSpan** **get_InitialSilenceTimeout();**
public: **property void set_InitialSilenceTimeout(TimeSpan);**

JScript public function **get InitialSilenceTimeout() : TimeSpan**
public function **set InitialSilenceTimeout(TimeSpan);**

Property Value

System.TimeSpan.

This property is read/write.

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IsActive Property

Note: This documentation is preliminary and is subject to change.

Gets or sets a value that specifies whether to activate and deactivate a set of grammars simultaneously when using a shared recognizer.

Definition

Visual Basic Public Property **IsActive** As **Boolean**

C# public **bool** **IsActive** { get; set; }

Managed C++ public: **property bool** **get_IsActive();**
public: **property void set_IsActive(bool);**

JScript public function **get IsActive() : boolean**
public function **set IsActive(boolean);**

Property Value

System.Boolean.

This property is read/write.

Remarks

For a top-level rule to be recognized, it must be active, it must be housed in an active grammar, and that grammar must be housed in a recognizer that is active. If any one of these three conditions are not met, the rule cannot be recognized. Setting this method is used in the shared case to activate and deactivate a set of grammars simultaneously.

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Properties Property

Note: This documentation is preliminary and is subject to change.

Gets the properties of the recognizer.

Definition

Visual Basic Public ReadOnly Property **Properties** As [RecognizerProperties](#)

C# public [RecognizerProperties](#) **Properties** { get; }

Managed C++ public: __property [RecognizerProperties](#)* get_**Properties**();

JScript public function get **Properties**() : [RecognizerProperties](#)

Property Value

System.Speech.Recognition.RecognizerProperties.

This property is read-only.

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State Property

Note: This documentation is preliminary and is subject to change.

Gets the current state of the recognizer.

Definition

Visual Basic Public ReadOnly Property **State** As [RecognizerState](#)

C# public [RecognizerState](#) **State** { get; }

Managed C++ public: __property [RecognizerState](#) get_**State**();

JScript public function get **State**() : [RecognizerState](#)

Property Value

System.Speech.Recognition.RecognizerState.

This property is read-only.

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AudioContentChanged Event

Note: This documentation is preliminary and is subject to change.

Occurs when the type of signal in the audio input changed.

Definition

Visual Basic Public Event **AudioContentChanged** As *AudioContentChangedEventHandler*
C# public event *AudioContentChangedEventHandler* **AudioContentChanged**;
Managed C++ public: __event **AudioContentChanged**;
JScript In JScript, you can use events, but you cannot define your own.

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Bookmark Event

Note: This documentation is preliminary and is subject to change.

Occurs when a bookmark is reached.

Definition

Visual Basic Public Event **Bookmark** As *BookmarkEventHandler*
C# public event *BookmarkEventHandler* **Bookmark**;
Managed C++ public: __event **Bookmark**;
JScript In JScript, you can use events, but you cannot define your own.

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Hypothesis Event

Note: This documentation is preliminary and is subject to change.

Occurs when a spoken phrase is partially recognized.

Definition

Visual Basic Public Event **Hypothesis** As *RecognitionEventHandler*

C# public event *RecognitionEventHandler* **Hypothesis**;

Managed C++ public: __event **Hypothesis**;

JScript In JScript, you can use events, but you cannot define your own.

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InterferenceDetected Event

Note: This documentation is preliminary and is subject to change.

Occurs when the speech recognition engine encounters interference in the input audio stream.

Definition

Visual Basic Public Event **InterferenceDetected** As *InterferenceEventHandler*

C# public event *InterferenceEventHandler* **InterferenceDetected**;

Managed C++ public: __event **InterferenceDetected**;

JScript In JScript, you can use events, but you cannot define your own.

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NoRecognition Event

Note: This documentation is preliminary and is subject to change.

Occurs when a spoken phrase is not recognized.

Definition

Visual Basic Public Event **NoRecognition** As *RecognitionEventHandler*

C# public event *RecognitionEventHandler* **NoRecognition**;

Managed C++ public: __event **NoRecognition**;

JScript In JScript, you can use events, but you cannot define your own.

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Recognition Event

Note: This documentation is preliminary and is subject to change.

Occurs when a spoken phrase is successfully recognized.

Definition

Visual Basic Public Event **Recognition** As *RecognitionEventHandler*

C# public event *RecognitionEventHandler* **Recognition**;

Managed C++ public: __event **Recognition**;

JScript In JScript, you can use events, but you cannot define your own.

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RecognizeCompleted Event

Note: This documentation is preliminary and is subject to change.

Occurs when recognition is complete.

Definition

Visual Basic Public Event **RecognizeCompleted** As *RecognizeCompletedEventHandler*

C# public event *RecognizeCompletedEventHandler* **RecognizeCompleted**;

Managed C++ public: __event **RecognizeCompleted**;

JScript In JScript, you can use events, but you cannot define your own.

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RecognizeProgressChanged Event

Note: This documentation is preliminary and is subject to change.

Occurs when recognition progress is made.

Definition

Visual Basic Public

Basic Event **RecognizeProgressChanged** As *RecognizeProgressChangedEventHandler*

C# public event

RecognizeProgressChangedEventHandler **RecognizeProgressChanged**;

Managed

C++ public: __event **RecognizeProgressChanged**;

JScript In JScript, you can use events, but you cannot define your own.

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RecognizerStateChanged Event

Note: This documentation is preliminary and is subject to change.

Occurs when recognition starts, or stops; or when recognition is canceled, paused, or resumed.

Definition

Visual Basic Public

Basic Event **RecognizerStateChanged** As *RecognizerStateChangedEventHandler*

C# public event

RecognizerStateChangedEventHandler **RecognizerStateChanged**;

Managed

C++

public: __event **RecognizerStateChanged**;

JScript In JScript, you can use events, but you cannot define your own.

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RejectedRecognition Event

Note: This documentation is preliminary and is subject to change.

Occurs when a spoken phrase is recognized with low confidence.

Definition

Visual Basic Public Event **RejectedRecognition** As *RecognitionEventHandler*

C# public event *RecognitionEventHandler* **RejectedRecognition**;

Managed C++ public: __event **RejectedRecognition**;

JScript In JScript, you can use events, but you cannot define your own.

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Update Event

Note: This documentation is preliminary and is subject to change.

Occurs when the Update button is clicked.

Definition

Visual Basic Public Event **Update** As *UpdateEventHandler*

C# public event *UpdateEventHandler* **Update**;

Managed C++ public: __event **Update**;

JScript In JScript, you can use events, but you cannot define your own.

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RecognitionAudio Class

Note: This documentation is preliminary and is subject to change.

Contains the audio data and methods for a specific **RecognitionResult** or a portion of a **RecognitionResult**.

Definition

Visual Basic Public Class **RecognitionAudio**
Inherits *Object*

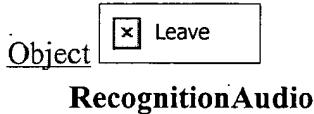
C# public class **RecognitionAudio** : *Object*

Managed C++ public __gc class **RecognitionAudio** : public *Object*

JScript public class **RecognitionAudio** extends *Object*

Members Table

Inheritance Hierarchy



Class Information

Namespace System.Speech.Recognition

Assembly System.Speech (system.speech.dll)

Strong Name System.Speech, Version=6.0.4044.0, Culture=neutral,

PublicKeyToken=365143bb27e7ac8b

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GetAudio Method

Note: This documentation is preliminary and is subject to change.

Gets all the audio associated with this instance of RecognitionAudio.

Overload List

```
public Void GetAudio (Stream)  
public Void GetAudio (Stream, TimeSpan, TimeSpan)  
public Void GetAudio (Stream, Int32, Int32)
```

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AudioLength Property

Note: This documentation is preliminary and is subject to change.

Gets the length of the audio data.

Definition

Visual Basic Public ReadOnly Property **AudioLength** As TimeSpan

C# public TimeSpan **AudioLength** { get; }

Managed C++ public: __property TimeSpan get_**AudioLength**();

JScript public function get **AudioLength**() : TimeSpan

Property Value

System.TimeSpan.

This property is read-only.

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AudioPosition Property

Note: This documentation is preliminary and is subject to change.

Gets the start point of the audio data, relative to the start of the stream.

Definition

```
Visual Basic Public ReadOnly Property AudioPosition As TimeSpan
C#     public TimeSpan AudioPosition { get; }
Managed C++ public: __property TimeSpan get_AudioPosition();
JScript     public function get AudioPosition() : TimeSpan
```

Property Value

System.TimeSpan.

This property is read-only.

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RecognitionEventArgs Class

Note: This documentation is preliminary and is subject to change.

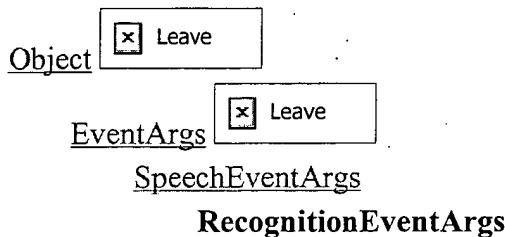
Provides data for the Recognition, RejectedRecognition, and Hypothesis events.

Definition

```
Visual Basic Public Class RecognitionEventArgs
Inherits SpeechEventArgs
C#     public class RecognitionEventArgs : SpeechEventArgs
Managed C++ public __gc class RecognitionEventArgs : public SpeechEventArgs
JScript     public class RecognitionEventArgs extends SpeechEventArgs
```

Members Table

Inheritance Hierarchy



Class Information

Namespace System.Speech.Recognition
Assembly System.Speech (system.speech.dll)
Strong Name System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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RecognitionEventArgs Method

Note: This documentation is preliminary and is subject to change.

Initializes a new instance of the RecognitionEventArgs class.

Definition

```
Visual Basic  Public Sub RecognitionEventArgs( _  
                  ByVal audioPosition As TimeSpan, _  
                  ByVal result As RecognitionResult, _  
                  ByVal resultType As ResultType _  
                  )  
  public RecognitionEventArgs(  
    TimeSpan audioPosition,  
    RecognitionResult result,  
    ResultType resultType  
  );  
  public: RecognitionEventArgs(  
    TimeSpan audioPosition,  
    RecognitionResult* result,  
    ResultType resultType  
  );  
  public function RecognitionEventArgs(  
    audioPosition : TimeSpan,  
    result : RecognitionResult,  
    resultType : ResultType  
  );
```

C#
Managed C++
JScript

Parameters

audioPosition **System.TimeSpan**. Placeholder
result **System.Speech.Recognition.RecognitionResult**. Result representing the recognized phrase.
resultType **System.Speech.Recognition.ResultType**. Type of result.

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Result Property

Note: This documentation is preliminary and is subject to change.

Gets the result of a recognition.

Definition

Visual Basic Public ReadOnly Property **Result** As RecognitionResult

C# public RecognitionResult **Result** { get; }

Managed C++ public: __property RecognitionResult* **get_Result()**;

JScript public function **get Result()** : RecognitionResult

Property Value

System.Speech.Recognition.RecognitionResult.

This property is read-only.

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ResultType Property

Note: This documentation is preliminary and is subject to change.

Gets the type of recognition result.

Definition

Visual Basic Public ReadOnly Property **ResultType** As ResultType

C# public ResultType **ResultType** { get; }

Managed C++ public: __property ResultType **get_ResultType()**;

JScript public function **get ResultType()** : ResultType

Property Value

System.Speech.Recognition.ResultType.

This property is read-only.

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RecognitionPhrase Class

Note: This documentation is preliminary and is subject to change.

Represents the phrase that was recognized by the recognizer.

Definition

Public Class **RecognitionPhrase**

Visual Basic Inherits Object
 Implements IDisposable

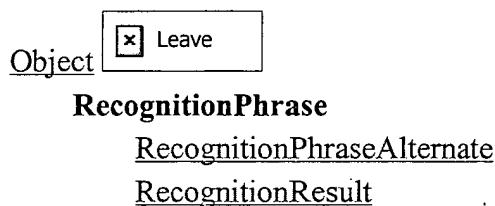
C# public class **RecognitionPhrase** : Object,
 IDisposable

Managed C++ public __gc class **RecognitionPhrase** : public Object,
 IDisposable

JScript public class **RecognitionPhrase** extends Object
 implements IDisposable

Members Table

Inheritance Hierarchy



Class Information

Namespace System.Speech.Recognition
Assembly System.Speech (system.speech.dll)
Strong Name System.Speech, Version=6.0.4044.0, Culture=neutral,
 PublicKeyToken=365143bb27e7ac8b

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Dispose Method

Note: This documentation is preliminary and is subject to change.

Releases SAPI resources.

Overload List

```
public Void Dispose()  
public Void Dispose(Boolean)
```

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Finalize Method

Note: This documentation is preliminary and is subject to change.

Destructor.

Definition

Visual Basic Overrides Protected Sub **Finalize()**
C# ~**RecognitionPhrase()**;
Managed C++ ~**RecognitionPhrase()**;
JScript protected override function **Finalize()** : **void**;

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Audio Property

Note: This documentation is preliminary and is subject to change.

Gets the audio for this phrase.

Definition

Visual Basic Public ReadOnly Property **Audio** As **RecognitionAudio**
C# public **RecognitionAudio** **Audio** { get; }
Managed C++ public: __property **RecognitionAudio*** get_**Audio**();
JScript public function get **Audio()** : **RecognitionAudio**

Property Value

System.Speech.Recognition.RecognitionAudio.

This property is read-only.

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Confidence Property

Note: This documentation is preliminary and is subject to change.

Gets the confidence score information included in recognition results.

Definition

Visual Basic Public ReadOnly Property **Confidence** As Confidence

C# public Confidence Confidence { get; }

Managed C++ public: __property Confidence get_Confidence();

JScript public function get Confidence() : Confidence

Property Value

System.Speech.Recognition.Confidence.

This property is read-only.

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EnginePrivateData Property

Note: This documentation is preliminary and is subject to change.

Gets an array of additional engine-specific data returned by the recognition engine.

Definition

Visual Basic Public ReadOnly Property **EnginePrivateData** As Byte()

C# public byte[] EnginePrivateData { get; }

Managed C++ public: __property Byte get_EnginePrivateData();

JScript public function get EnginePrivateData() : byte[]

Property Value

System.Byte.

This property is read-only.

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Grammar Property

Note: This documentation is preliminary and is subject to change.

Gets the grammar that contained the rule that produced this result.

Definition

Visual Basic Public ReadOnly Property **Grammar As Grammar**
C# public Grammar Grammar { get; }
Managed C++ public: __property Grammar* get_Grammar();
JScript public function get Grammar() : Grammar

Property Value

System.Speech.Recognition.Grammar.

This property is read-only.

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Language Property

Note: This documentation is preliminary and is subject to change.

Gets the language ID for the current CultureInfo.

Definition

Visual Basic Public ReadOnly Property **Language As CultureInfo Class**
C# public CultureInfo Class Language { get; }
Managed C++ public: __property CultureInfo Class* get_Language();
JScript public function get Language() : CultureInfo Class

Property Value

System.Globalization.CultureInfo.

This property is read-only.

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Properties Property

Note: This documentation is preliminary and is subject to change.

Gets the collection of semantic properties associated with this RecognitionPhrase.

Definition

Visual Basic Public ReadOnly Property **Properties** As SemanticPropertyCollection
C# public SemanticPropertyCollection **Properties** { get; }
Managed C++ public: __property SemanticPropertyCollection* get_**Properties**();
JScript public function get **Properties**() : SemanticPropertyCollection

Property Value

System.Speech.Recognition.SemanticPropertyCollection.

This property is read-only.

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RecognizerConfidence Property

Note: This documentation is preliminary and is subject to change.

Gets the confidence score information included in recognition results.

Definition

Visual Basic Public ReadOnly Property **RecognizerConfidence** As Single
C# public float **RecognizerConfidence** { get; }
Managed C++ public: __property float get_**RecognizerConfidence**();
JScript public function get **RecognizerConfidence**() : float

Property Value

System.Single.

This property is read-only.

Remarks

This value is not standardized across multiple speech recognizers, and may change from version to version of a specific recognizer.

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Rule Property

Note: This documentation is preliminary and is subject to change.

Gets the rule that allowed this result to be recognized, and the rule's parse tree.

Definition

Visual Basic Public ReadOnly Property **Rule** As RecognitionRule

C# public RecognitionRule Rule { get; }

Managed C++ public: __property RecognitionRule* get_Rule();

JScript public function get Rule() : RecognitionRule

Property Value

System.Speech.Recognition.RecognitionRule.

This property is read-only.

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Sml Property

Note: This documentation is preliminary and is subject to change.

Returns the XML that represents the semantic properties, in SML form.

Definition

Visual Basic Public ReadOnly Property **Sml** As String

C# public string Sml { get; }

Managed C++ public: __property String* get_Sml();

JScript public function get Sml() : String

Property Value

System.String.

This property is read-only.

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SpokenText Property

Note: This documentation is preliminary and is subject to change.

Gets the spoken text for this phrase.

Definition

Visual Basic Public ReadOnly Property **SpokenText** As String

C# public string **SpokenText** { get; }

Managed C++ public: __property String* get_SpokenText();

JScript public function get **SpokenText()** : String

Property Value

System.String.

This property is read-only.

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SpokenTokens Property

Note: This documentation is preliminary and is subject to change.

Gets the collection of tokens that make up this RecognitionPhrase.

Definition

Visual Basic Public ReadOnly Property **SpokenTokens** As SpokenTokenCollection

C# public SpokenTokenCollection **SpokenTokens** { get; }

Managed C++ public: __property SpokenTokenCollection* get_SpokenTokens();

JScript public function get **SpokenTokens()** : SpokenTokenCollection

Property Value

System.Speech.Recognition.SpokenTokenCollection.

This property is read-only.

Remarks

There are two forms of the recognition result, available as the SpokenTokens property and the Tokens property. The SpokenTokens property represents the lexical words that were recognized, and allows access to attributes like lexical text, pronunciation, and confidence score. The Tokens property represents the text of the recognized words and allows access to the display text and leading and trailing space information.

For example, the speech "there are thirteen donuts in a baker's dozen period" will result in "there are thirteen donuts in a baker's dozen period" for the SpokenTokens property, and "There are 13 donuts in a baker's dozen." for the Tokens property.

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Text Property

Note: This documentation is preliminary and is subject to change.

Gets the written text for this phrase.

Definition

Visual Basic Public ReadOnly Property Text As String

C# public string Text { get; }

Managed C++ public: __property String* get_Text();

JScript public function get Text() : String

Property Value

System.String.

This property is read-only.

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Tokens Property

Note: This documentation is preliminary and is subject to change.

Gets the collection of tokens that make up this RecognitionPhrase.

Definition

Visual Basic Public ReadOnly Property **Tokens** As DisplayTokenCollection

C# public DisplayTokenCollection **Tokens** { get; }

Managed C++ public: __property DisplayTokenCollection* get_Tokens();

JScript public function get **Tokens()** : DisplayTokenCollection

Property Value

System.Speech.Recognition.DisplayTokenCollection.

This property is read-only.

Remarks

There are two forms of the recognition result, available as the SpokenTokens property and the Tokens property. The SpokenTokens property represents the lexical words that were recognized, and allows access to attributes like lexical text, pronunciation, and confidence score. The Tokens property represents the text of the recognized words and allows access to the display text and leading and trailing space information.

For example, the speech "there are thirteen donuts in a baker's dozen period" will result in "there are thirteen donuts in a baker's dozen period" for the SpokenTokens property, and "There are 13 donuts in a baker's dozen." for the Tokens property.

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RecognitionPhraseAlternate Class

Note: This documentation is preliminary and is subject to change.

Contains information about an alternate recognition by the speech recognizer.

Definition

Visual Basic Public Class **RecognitionPhraseAlternate**
Inherits RecognitionPhrase

C# public class **RecognitionPhraseAlternate** : RecognitionPhrase

Managed public __gc

C++ class **RecognitionPhraseAlternate** : public RecognitionPhrase

JScript public class **RecognitionPhraseAlternate** extends RecognitionPhrase

Members Table

Inheritance Hierarchy

Object **Leave**
RecognitionPhrase
RecognitionPhraseAlternate

Class Information

Namespace System.Speech.Recognition
Assembly System.Speech (system.speech.dll)
Strong Name System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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Dispose Method

Note: This documentation is preliminary and is subject to change.

Definition

Visual Basic Overrides Protected Sub **Dispose**(
 ByVal *disposing* As **Boolean**
)
 protected override **void** **Dispose**(
 bool *disposing*
);
 protected: **void** **Dispose**(
Managed C++ **bool** *disposing*
);
 protected override function **Dispose**(
JScript *disposing* : **boolean**
) : **void**;

Parameters

disposing **System.Boolean**.

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AlternateSpokenText Property

Note: This documentation is preliminary and is subject to change.

Gets the text of an alternate recognition result representing an actual spoken word unit, including lexical text, pronunciation, and confidence score.

Definition

```
Visual Basic Public ReadOnly Property AlternateSpokenText As String
C#     public string AlternateSpokenText { get; }
Managed C++ public: __property String* get_AlternateSpokenText();
JScript   public function get AlternateSpokenText() : String
```

Property Value

System.String.

This property is read-only.

Remarks

This alternative text does not include the text that was the same as in the original result, either at the beginning, or at the end. The Text property contains full text for this alternative, including the text that was the same as in the original result, at the beginning and at the end

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AlternateSpokenTokens Property

Note: This documentation is preliminary and is subject to change.

Gets the collection of tokens representing actual spoken word units not present at the beginning or the end of the original result.

Definition

```
Visual Basic Public ReadOnly Property AlternateSpokenTokens As SpokenTokenCollection
C#     public SpokenTokenCollection AlternateSpokenTokens { get; }
Managed C++ public: __property SpokenTokenCollection* get_AlternateSpokenTokens();
JScript   public function get AlternateSpokenTokens() : SpokenTokenCollection
```

Property Value

System.Speech.Recognition.SpokenTokenCollection.

This property is read-only.

Remarks

This alternative collection of tokens does not include the tokens that were the same as in the original result, either at the beginning, or at the end. The Tokens property contains full collection of tokens for this alternative, including the tokens that were the same as in the original collection of tokens, at the beginning and at the end

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AlternateText Property

Note: This documentation is preliminary and is subject to change.

Gets the normalized form of an alternate recognition result, including display text and normalized text, and white-space information.

Definition

Visual Basic Public ReadOnly Property **AlternateText** As String

C# public string **AlternateText** { get; }

Managed C++ public: __property String* get_**AlternateText**();

JScript public function get **AlternateText**() : String

Property Value

System.String.

This property is read-only.

Remarks

This alternative text does not include the text that was the same as in the original result, either at the beginning, or at the end. The Text property contains full text for this alternative, including the text that was the same as in the original result, at the beginning and at the end

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AlternateTokens Property

Note: This documentation is preliminary and is subject to change.

Gets the collection of tokens representing the alternate normalized form of an alternate recognition result, not present at the beginning or the end of the original result.

Definition

Visual Basic Public ReadOnly Property **AlternateTokens** As DisplayTokenCollection

C# public DisplayTokenCollection **AlternateTokens** { get; }

Managed C++ public: property DisplayTokenCollection* **get_AlternateTokens()**;

JScript public function **get AlternateTokens()** : DisplayTokenCollection

Property Value

System.Speech.Recognition.DisplayTokenCollection.

This property is read-only.

Remarks

This alternative collection of tokens does not include the tokens that were the same as in the original result, either at the beginning, or at the end. The **Tokens** property contains full collection of tokens for this alternative, including the tokens that were the same as in the original collection of tokens, at the beginning and at the end

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OriginalSpokenText Property

Note: This documentation is preliminary and is subject to change.

Gets the text representing an actual spoken word unit, including lexical text, pronunciation, and confidence score, in the original recognition result that is replaced by the alternate.

Definition

Visual Basic Public ReadOnly Property **OriginalSpokenText** As String

C# public string **OriginalSpokenText** { get; }

Managed C++ public: property String* **get_OriginalSpokenText()**;

JScript public function **get OriginalSpokenText()** : String

Property Value

System.String.

This property is read-only.

Remarks

This original text does not include the text that was the same as in the alternative, either at the beginning, or at the end. The Text property on the result object contains full text for the original phrase, including the text that was the same as in the alternative, at the beginning and at the end

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OriginalSpokenTokens Property

Note: This documentation is preliminary and is subject to change.

Gets the collection of tokens representing actual spoken words that this alternate replaces.

Definition

Visual Basic Public ReadOnly Property **OriginalSpokenTokens** As SpokenTokenCollection
C# public SpokenTokenCollection **OriginalSpokenTokens** { get; }
Managed C++ public: __property SpokenTokenCollection* get_OriginalSpokenTokens();
JScript public function get **OriginalSpokenTokens()** : SpokenTokenCollection

Property Value

System.Speech.Recognition.SpokenTokenCollection.

This property is read-only.

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OriginalText Property

Note: This documentation is preliminary and is subject to change.

Gets the normalized form of the text that this alternative replaces in the original result.

Definition

Visual Basic Public ReadOnly Property **OriginalText** As String
C# public string **OriginalText** { get; }
Managed C++ public: __property String* get_OriginalText();

JScript public function get **OriginalText()** : **String**

Property Value

System.String.

This property is read-only.

Remarks

This original text does not include the text that was the same as in the alternative, either at the beginning, or at the end. The Text property on the result object contains full text for the original phrase, including the text that was the same as in the alternative, at the beginning and at the end

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OriginalTokens Property

Note: This documentation is preliminary and is subject to change.

Gets the collection of tokens representing the normalized form of the recognition that this alternate replaces.

Definition

Visual Basic Public ReadOnly Property **OriginalTokens** As **DisplayTokenCollection**

C# public **DisplayTokenCollection** **OriginalTokens** { get; }

Managed C++ public: **property DisplayTokenCollection* get_OriginalTokens();**

JScript public function get **OriginalTokens()** : **DisplayTokenCollection**

Property Value

System.Speech.Recognition.DisplayTokenCollection.

This property is read-only.

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RecognitionPhraseAlternateCollection Class

Note: This documentation is preliminary and is subject to change.

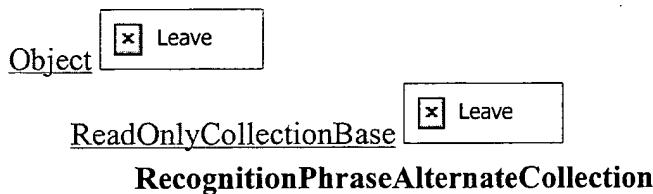
A collection of alternatives for a specific result.

Definition

Visual Basic Public Class **RecognitionPhraseAlternateCollection**
Basic Inherits ReadOnlyCollectionBase
C# public class **RecognitionPhraseAlternateCollection** : ReadOnlyCollectionBase
Managed public __gc
C++ class **RecognitionPhraseAlternateCollection** : public ReadOnlyCollectionBase
JScript public class **RecognitionPhraseAlternateCollection** extends ReadOnlyCollectionBase

Members Table

Inheritance Hierarchy



Class Information

Namespace System.Speech.Recognition
Assembly System.Speech (system.speech.dll)
Strong Name System.Speech, Version=6.0.4044.0, Culture=neutral,
 PublicKeyToken=365143bb27e7ac8b

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Item Property

Note: This documentation is preliminary and is subject to change.

Gets a specific alternative from the collection.

Definition

Visual Basic Public ReadOnly Property **Item**(
 ByVal *index* As Integer
) As RecognitionPhraseAlternate
C# public RecognitionPhraseAlternate this[
 int *index*
] { get; }
 public: __property RecognitionPhraseAlternate* get_**Item**(

Managed C++ `int index`
);

JScript In JScript, you can use indexed properties, but you cannot define your own.

Property Value

System.Speech.Recognition.RecognitionPhraseAlternate.

This property is read-only.

Parameters

index **System.Int32.**

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RecognitionResult Class

Note: This documentation is preliminary and is subject to change.

Represents the result when a speech recognizer processes audio and attempts to recognize user speech.

Definition

Visual Basic Public Class **RecognitionResult**
Inherits *RecognitionPhrase*

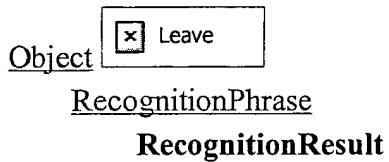
C# public class **RecognitionResult** : *RecognitionPhrase*

Managed C++ public __gc class **RecognitionResult** : public *RecognitionPhrase*

JScript public class **RecognitionResult** extends *RecognitionPhrase*

Members Table

Inheritance Hierarchy



Class Information

Namespace **System.Speech.Recognition**

Assembly **System.Speech (system.speech.dll)**

Strong **System.Speech, Version=6.0.4044.0, Culture=neutral,**

Name PublicKeyToken=365143bb27e7ac8b

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Dispose Method

Note: This documentation is preliminary and is subject to change.

Definition

Visual Basic Overrides Protected Sub **Dispose**(
 `ByVal disposing As Boolean`
 `)`
 protected override **void Dispose**(
 `bool disposing`
 `)`
 protected: **void Dispose**(
Managed C++ `bool disposing`
 `)`
 protected override function **Dispose**(
JScript `disposing : boolean`
 `) : void;`

Parameters

disposing `System.Boolean`.

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GetSmlAlternates Method

Note: This documentation is preliminary and is subject to change.

Gets the XML that represents the semantic properties in SML form.

Definition

Visual Basic Public Function **GetSmlAlternates**(
 `ByVal numberAlternates As Integer`
 `) As String`

C# public `string GetSmlAlternates(`
 `int numberAlternates`

```
 );
public: String* GetSmlAlternates(
Managed C++   int numberOfAlternates
);
public function GetSmlAlternates(
JScript      numberOfAlternates : int
) : String;
```

Parameters

numberOfAlternates **System.Int32**.

Return Value

System.String.

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PerformCorrection Method

Note: This documentation is preliminary and is subject to change.

Specifies that the alternate recognition should replace the recognition selected by the speech recognition (SR) engine, thus indicating to the speech recognizer that it can learn from this overriding choice by the end user.

Overload List

```
public RecognitionResult PerformCorrection (RecognitionPhraseAlternate)
public Void PerformCorrection (Int32, Int32, String)
```

Remarks

Not all speech recognizers learn from this information.

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Alternates Property

Note: This documentation is preliminary and is subject to change.

Gets a collection of alternate phrases.

Definition

Visual Basic Public ReadOnly Property **Alternates** As RecognitionPhraseAlternateCollection
C# public RecognitionPhraseAlternateCollection **Alternates** { get; }
Managed C++ public: __property RecognitionPhraseAlternateCollection* get_Alternates();
JScript public function get **Alternates()** : RecognitionPhraseAlternateCollection

Property Value

System.Speech.Recognition.RecognitionPhraseAlternateCollection.

This property is read-only.

Remarks

Alternates differs from GetAlternates in that the developer does not specify the focus of where to look for alternates in the collection of tokens. The Alternates collection returned by the Alternates property is the same as what would be returned from GetAlternates when specifying the first token, and the number of tokens in the Tokens collection.

Many recognitions, successful or not, frequently return several words or phrases that closely match the spoken sequence. The one most nearly matching the sequence with a high confidence level is returned as a successful recognition. The other words and phrases are returned as alternates that are available for examination.

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AudioLength Property

Note: This documentation is preliminary and is subject to change.

Gets the length of the audio this result contains.

Definition

Visual Basic Public ReadOnly Property **AudioLength** As TimeSpan
C# public TimeSpan **AudioLength** { get; }
Managed C++ public: __property TimeSpan get_AudioLength();
JScript public function get **AudioLength()** : TimeSpan

Property Value

System.TimeSpan.

This property is read-only.

Remarks

This is the latest point that any of the times in the main result or alternates will refer to. This is equivalent to `ullLength` in `RecoResultTimes`.

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AudioPosition Property

Note: This documentation is preliminary and is subject to change.

Gets the time between the start of the stream and the start of the result audio.

Definition

Visual Basic Public ReadOnly Property **AudioPosition** As TimeSpan

C# public TimeSpan **AudioPosition** { get; }

Managed C++ public: __property TimeSpan get_**AudioPosition**();

JScript public function get **AudioPosition**() : TimeSpan

Property Value

System.TimeSpan.

This property is read-only.

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IsEmulatedResult Property

Note: This documentation is preliminary and is subject to change.

Gets a value that specifies whether the result is a text-based emulation of a recognition result, for example from calling the `EmulateRecognize` method.

Definition

Visual Basic Public ReadOnly Property **IsEmulatedResult** As Boolean

C# public bool **IsEmulatedResult** { get; }

Managed C++ public: __property bool get_**IsEmulatedResult**();

JScript public function **get IsEmulatedResult()** : boolean

Property Value

System.Boolean.

This property is read-only.

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StartTime Property

Note: This documentation is preliminary and is subject to change.

Gets the instant in time, expressed as a date and time of day, that the user started speaking.

Definition

Visual Basic Public ReadOnly Property **StartTime** As Date

 C# public DateTime **StartTime** { get; }

Managed C++ public: __property DateTime get_StartTime();

JScript public function **get StartTime()** : DateTime

Property Value

System.DateTime.

This property is read-only.

Remarks

For recognition from non-real time audio sources, currently StartTime should throw but could think about changing SAPI here. This is ftStreamTime from RecoResultTimes. It is possible to use this to measure the latency between the user finishing speaking and the recognition result being returned: TimeSpan latency = DateTime.Now - (result.StartTime + result.AudioLength)

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RecognitionRule Class

Note: This documentation is preliminary and is subject to change.

Represents the rule that allowed the associated result to be recognized.

Definition

Visual Basic Public Class **RecognitionRule**
 Inherits *Object*

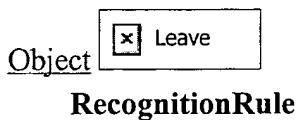
C# public class **RecognitionRule** : *Object*

Managed C++ public __gc class **RecognitionRule** : public *Object*

JScript public class **RecognitionRule** extends *Object*

Members Table

Inheritance Hierarchy



Class Information

Namespace System.Speech.Recognition
Assembly System.Speech (system.speech.dll)
Strong Name System.Speech, Version=6.0.4044.0, Culture=neutral,
 PublicKeyToken=365143bb27e7ac8b

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Confidence Property

Note: This documentation is preliminary and is subject to change.

Gets confidence score information that expresses how confident the speech Recognizer is that this is the correct rule.

Definition

Visual Basic Public ReadOnly Property **Confidence** As *Confidence*
C# public **Confidence** **Confidence** { get; }
Managed C++ public: __property **Confidence** get_**Confidence**();
JScript public function get **Confidence**() : **Confidence**

Property Value

System.Speech.Recognition.Confidence.

This property is read-only.

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Name Property

Note: This documentation is preliminary and is subject to change.

Gets the name of the rule that was recognized.

Definition

```
Visual Basic Public ReadOnly Property Name As String
C#     public string Name { get; }
Managed C++ public: __property String* get_Name();
JScript   public function get Name() : String
```

Property Value

System.String.

This property is read-only.

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RecognizerConfidence Property

Note: This documentation is preliminary and is subject to change.

Gets confidence score information that expresses how confident the speech Recognizer is that this is the correct rule.

Definition

```
Visual Basic Public ReadOnly Property RecognizerConfidence As Single
C#     public float RecognizerConfidence { get; }
Managed C++ public: __property float get_RecognizerConfidence();
JScript   public function get RecognizerConfidence() : float
```

Property Value

System.Single.

This property is read-only.

Remarks

This value is not standardized across multiple speech Recognizers and can even change from version to version of a specific recognizer.

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Rules Property

Note: This documentation is preliminary and is subject to change.

Gets the RulesCollection returned by the Rules property. If this rule was constructed by referencing other rules, the referenced rules are contained in the collection.

Definition

Visual Basic Public ReadOnly Property **Rules** As RecognitionRuleCollection

C# public RecognitionRuleCollection Rules { get; }

Managed C++ public: __property RecognitionRuleCollection* get_Rules();

JScript public function get Rules() : RecognitionRuleCollection

Property Value

System.Speech.Recognition.RecognitionRuleCollection.

This property is read-only.

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Text Property

Note: This documentation is preliminary and is subject to change.

Gets the display text for the recognition result that this rule encompasses.

Definition

Visual Basic Public ReadOnly Property **Text** As String

C# public string Text { get; }

Managed C++ public: __property String* get_Text();

JScript public function **get Text()** : String

Property Value

System.String.

This property is read-only.

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Tokens Property

Note: This documentation is preliminary and is subject to change.

Gets the set of tokens for the recognition result that this rule encompasses.

Definition

Visual Basic Public ReadOnly Property **Tokens** As SpokenTokenCollection

C# public SpokenTokenCollection **Tokens** { get; }

Managed C++ public: __property SpokenTokenCollection* get_Tokens();

JScript public function **get Tokens()** : SpokenTokenCollection

Property Value

System.Speech.Recognition.SpokenTokenCollection.

This property is read-only.

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RecognitionRuleCollection Class

Note: This documentation is preliminary and is subject to change.

Provides a collection of rules.

Definition

Visual Basic Public Class **RecognitionRuleCollection**

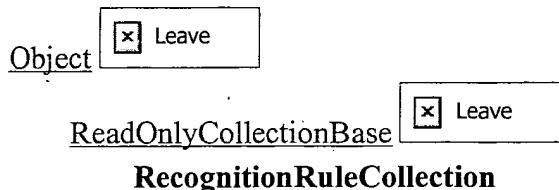
 Inherits ReadOnlyCollectionBase

C# public class **RecognitionRuleCollection** : ReadOnlyCollectionBase

Managed public __gc
C++ class **RecognitionRuleCollection** : public *ReadOnlyCollectionBase*
JScript public class **RecognitionRuleCollection** extends *ReadOnlyCollectionBase*

Members Table

Inheritance Hierarchy



Class Information

Namespace System.Speech.Recognition
Assembly System.Speech (system.speech.dll)
Strong Name System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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get_Item Method

Note: This documentation is preliminary and is subject to change.

Overload List

public RecognitionRule get_Item (String)
public RecognitionRule get_Item (Int32)

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Item Property

Note: This documentation is preliminary and is subject to change.

Gets the rule at the specified position.

Overload List

public RecognitionRule Item (Int32)
public RecognitionRule Item (String)

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RecognizeCompletedEventArgs Class

Note: This documentation is preliminary and is subject to change.

Provides event arguments for the RecognizeCompleted event.

Definition

Public Class **RecognizeCompletedEventArgs**

Visual	Inherits <i>err! bad xref</i> .
Basic	<i>frlrfSystemComponentModelAsyncCompletedEventArgsClassTopic; lookup failure; no href; no caption;</i>
C#	public class RecognizeCompletedEventArgs : <i>err! bad xref</i> : <i>frlrfSystemComponentModelAsyncCompletedEventArgsClassTopic; lookup failure; no href; no caption;</i>
Managed	public __gc class RecognizeCompletedEventArgs : public <i>err! bad xref</i> : <i>frlrfSystemComponentModelAsyncCompletedEventArgsClassTopic; lookup failure; no href; no caption;</i>
C++	
JScript	public class RecognizeCompletedEventArgs extends <i>err! bad xref</i> : <i>frlrfSystemComponentModelAsyncCompletedEventArgsClassTopic; lookup failure; no href; no caption;</i>

Members Table

Inheritance Hierarchy

err! bad xref: frlrfSystemComponentModelAsyncCompletedEventArgsClassTopic; lookup failure; no href; no caption;
RecognizeCompletedEventArgs

Class Information

Namespace System.Speech.Recognition
Assembly System.Speech (system.speech.dll)
Strong Name System.Speech, Version=6.0.4044.0, Culture=neutral,
PublicKeyToken=365143bb27e7ac8b

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RecognizeCompletedEventArgs Method

Note: This documentation is preliminary and is subject to change.

Initializes a new instance of the RecognizeCompletedEventArgs class.

Definition

```
Visual Basic
Public Sub RecognizeCompletedEventArgs( _
    ByVal error As Exception, _
    ByVal cancelled As Boolean, _
    ByVal userToken As Object, _
    ByVal result As RecognitionResult _
)
    public RecognizeCompletedEventArgs(
        Exception error,
        bool cancelled,
        object userToken,
        RecognitionResult result
    );
    public: RecognizeCompletedEventArgs(
        Exception* error,
        bool cancelled,
        Object* userToken,
        RecognitionResult* result
    );
    public function RecognizeCompletedEventArgs(
        error : Exception,
        cancelled : boolean,
        userToken : Object,
        result : RecognitionResult
    );

```

C#

```
public RecognizeCompletedEventArgs(
    Exception error,
    bool cancelled,
    object userToken,
    RecognitionResult result
);

```

Managed C++

```
public: RecognizeCompletedEventArgs(
    Exception* error,
    bool cancelled,
    Object* userToken,
    RecognitionResult* result
);

```

JScript

```
public function RecognizeCompletedEventArgs(
    error : Exception,
    cancelled : boolean,
    userToken : Object,
    result : RecognitionResult
);

```

Parameters

error **System.Exception**.
cancelled **System.Boolean**.
userToken **System.Object**.
result **System.Speech.Recognition.RecognitionResult**. Result representing the last recognized phrase.

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Result Property

Note: This documentation is preliminary and is subject to change.

Gets the recognition result.

Definition

Visual Basic Public ReadOnly Property **Result** As RecognitionResult

C# public RecognitionResult **Result** { get; }

Managed C++ public: __property RecognitionResult* get_ **Result**();

JScript public function **get Result()** : RecognitionResult

Property Value

System.Speech.Recognition.RecognitionResult.

This property is read-only.

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RecognizeProgressChangedEventArgs Class

Note: This documentation is preliminary and is subject to change.

Provides data for the RecognizeProgressChanged event.

Definition

Visual Basic Public Class **RecognizeProgressChangedEventArgs**

Basic Inherits SpeechEventArgs

C# public class **RecognizeProgressChangedEventArgs** : SpeechEventArgs

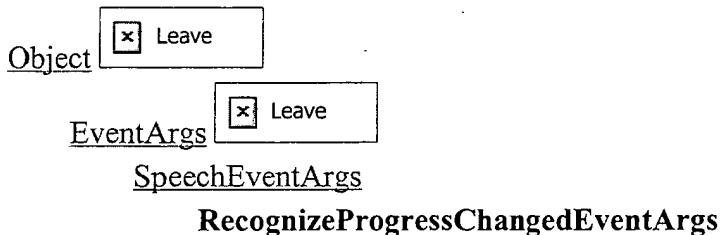
Managed public __gc

C++ class **RecognizeProgressChangedEventArgs** : public SpeechEventArgs

JScript public class **RecognizeProgressChangedEventArgs** extends SpeechEventArgs

Members Table

Inheritance Hierarchy



Class Information

Namespace System.Speech.Recognition
Assembly System.Speech (system.speech.dll)
Strong Name System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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RecognizeProgressChangedEventArgs Method

Note: This documentation is preliminary and is subject to change.

Initializes a new instance of the AudioContentChangedEventArgs class.

Definition

```
Public Sub RecognizeProgressChangedEventArgs( _
  ByVal audioPosition As TimeSpan, _
  ByVal recognizerPosition As TimeSpan, _
  ByVal audioLevel As Integer _
)
  public RecognizeProgressChangedEventArgs(
    TimeSpan audioPosition,
    TimeSpan recognizerPosition,
    int audioLevel
  );
  public: RecognizeProgressChangedEventArgs(
    TimeSpan audioPosition,
    TimeSpan recognizerPosition,
    int audioLevel
  );
  public function RecognizeProgressChangedEventArgs(
    audioPosition : TimeSpan,
    recognizerPosition : TimeSpan,
    audioLevel : int
  );

```

Parameters

audioPosition **System.TimeSpan.**
recognizerPosition **System.TimeSpan.**
audioLevel **System.Int32.**

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AudioLevel Property

Note: This documentation is preliminary and is subject to change.

Gets the old audio state.

Definition

Visual Basic Public ReadOnly Property **AudioLevel** As **Integer**

C# public **int** **AudioLevel** { **get**; }

Managed C++ public: **__property int** **get_AudioLevel()**;

JScript public function **get AudioLevel()** : **int**

Property Value

System.Int32.

This property is read-only.

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RecognizerPosition Property

Note: This documentation is preliminary and is subject to change.

Gets the recognizer position in the audio stream at the time the event is raised.

Definition

Visual Basic Public ReadOnly Property **RecognizerPosition** As **TimeSpan**

C# public **TimeSpan** **RecognizerPosition** { **get**; }

Managed C++ public: **__property TimeSpan** **get_RecognizerPosition()**;

JScript public function **get RecognizerPosition()** : **TimeSpan**

Property Value

System.TimeSpan.

This property is read-only.

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RecognizerAttributes Class

Note: This documentation is preliminary and is subject to change.

Represents the attributes various speech recognizers may, or may not support.

Definition

Visual Basic Public Class **RecognizerAttributes**
 Inherits *Object*

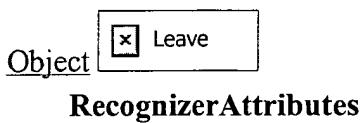
C# public class **RecognizerAttributes** : *Object*

Managed C++ public __gc class **RecognizerAttributes** : public *Object*

JScript public class **RecognizerAttributes** extends *Object*

Members Table

Inheritance Hierarchy



Remarks

If this object is created directly, then trying to get properties that are not set yet will throw an exception. If this object is obtained from a recognizer then it is read-only and trying to set will have no effect.

Class Information

Namespace System.Speech.Recognition
Assembly System.Speech (system.speech.dll)
Strong Name System.Speech, Version=6.0.4044.0, Culture=neutral,
 PublicKeyToken=365143bb27e7ac8b

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GetCustomAttribute Method

Note: This documentation is preliminary and is subject to change.

Gets the specified custom recognizer attribute.

Definition

```
Visual Basic  Public Function GetCustomAttribute( _
                  ByVal attributeName As String _
                ) As String
C#           public string GetCustomAttribute(
                  string attributeName
                );
Managed C++  public: String* GetCustomAttribute(
                  String* attributeName
                );
JScript      public function GetCustomAttribute(
                  attributeName : String
                ) : String;
```

Parameters

attributeName **System.String**.

Return Value

System.String.

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DisplayName Property

Note: This documentation is preliminary and is subject to change.

Gets the display name of the recognizer.

Definition

```
Visual Basic  Public ReadOnly Property DisplayName As String
C#           public string DisplayName { get; }
Managed C++  public: __property String* get_DisplayName();
JScript      public function get DisplayName() : String
```

Property Value

System.String.

This property is read-only.

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Id Property

Note: This documentation is preliminary and is subject to change.

Gets the unique ID of this recognizer.

Definition

Visual Basic Public ReadOnly Property **Id** As **String**

C# public **string** **Id** { get; }

Managed C++ public: **property String*** **get_Id()**;

JScript public function **get Id()** : **String**

Property Value

System.String.

This property is read-only.

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IsVendorPreferred Property

Note: This documentation is preliminary and is subject to change.

Gets a value that specifies, if multiple recognizers are installed on the machine by the same vendor, whether this recognizer is the one preferred by the vendor.

Definition

Visual Basic Public ReadOnly Property **IsVendorPreferred** As **Boolean**

C# public **bool** **IsVendorPreferred** { get; }

Managed C++ public: **property bool** **get_IsVendorPreferred()**;

JScript public function **get IsVendorPreferred()** : **boolean**

Property Value

System.Boolean.

This property is read-only.

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Languages Property

Note: This documentation is preliminary and is subject to change.

Gets the CultureInfo IDs of the languages this engine recognizes.

Definition

Visual Basic Public ReadOnly Property **Languages** As [CultureInfo Class\(\)](#)

C# public [CultureInfo Class\[\]](#) Languages { get; }

Managed C++ public: __property [CultureInfo Class*](#) get_Languages();

JScript public function get Languages() : [CultureInfo Class\[\]](#)

Property Value

System.Globalization.CultureInfo.

This property is read-only.

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Name Property

Note: This documentation is preliminary and is subject to change.

Gets the name of the recognizer.

Definition

Visual Basic Public ReadOnly Property **Name** As [String](#)

C# public [string](#) Name { get; }

Managed C++ public: __property [String*](#) get_Name();

JScript public function get Name() : [String](#)

Property Value

System.String.

This property is read-only.

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SupportedAudioFormats Property

Note: This documentation is preliminary and is subject to change.

Gets the audio formats this engine supports.

Definition

Visual Basic Public ReadOnly Property **SupportedAudioFormats** As Object()

C# public object[] **SupportedAudioFormats** { get; }

Managed C++ public: __property Object* get_SupportedAudioFormats();

JScript public function get **SupportedAudioFormats**() : Object[]

Property Value

System.Object.

This property is read-only.

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SupportsCommandAlternates Property

Note: This documentation is preliminary and is subject to change.

Gets a value that specifies whether the recognizer supports alternates for command and control results.

Definition

Visual Basic Public ReadOnly Property **SupportsCommandAlternates** As Boolean

C# public bool **SupportsCommandAlternates** { get; }

Managed C++ public: __property bool get_SupportsCommandAlternates();

JScript public function get **SupportsCommandAlternates**() : boolean

Property Value

System.Boolean.

This property is read-only.

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SupportsCommands Property

Note: This documentation is preliminary and is subject to change.

Gets a value that specifies whether the recognizer supports command and control.

Definition

Visual Basic Public ReadOnly Property **SupportsCommands** As **Boolean**

C# public **bool** **SupportsCommands** { get; }

Managed C++ public: **property bool get_SupportsCommands();**

JScript public function get **SupportsCommands()** : **boolean**

Property Value

System.Boolean.

This property is read-only.

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SupportsContinuousRecognition Property

Note: This documentation is preliminary and is subject to change.

Gets a value that specifies whether the recognizer supports continuous recognition, which does not require pauses between words.

Definition

Visual Basic Public ReadOnly Property **SupportsContinuousRecognition** As **Boolean**

C# public **bool** **SupportsContinuousRecognition** { get; }

Managed C++ public: **property bool get_SupportsContinuousRecognition();**

JScript public function get **SupportsContinuousRecognition()** : **boolean**

Property Value

System.Boolean.

This property is read-only.

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SupportsDesktop Property

Note: This documentation is preliminary and is subject to change.

Gets a value that specifies whether the recognizer supports desktop audio input.

Definition

Visual Basic Public ReadOnly Property **SupportsDesktop** As **Boolean**

C# public **bool** **SupportsDesktop** { get; }

Managed C++ public: __property **bool** get_**SupportsDesktop**();

JScript public function get **SupportsDesktop()** : **boolean**

Property Value

System.Boolean.

This property is read-only.

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SupportsDictation Property

Note: This documentation is preliminary and is subject to change.

Gets a value that specifies whether the recognizer supports dictation.

Definition

Visual Basic Public ReadOnly Property **SupportsDictation** As **Boolean**

C# public **bool** **SupportsDictation** { get; }

Managed C++ public: __property **bool** get_**SupportsDictation**();

JScript public function get **SupportsDictation()** : **boolean**

Property Value

System.Boolean.

This property is read-only.

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SupportsDictationAlternates Property

Note: This documentation is preliminary and is subject to change.

Gets a value that specifies whether the recognizer supports alternates for dictation results.

Definition

Visual Basic Public ReadOnly Property **SupportsDictationAlternates** As **Boolean**

C# public **bool** **SupportsDictationAlternates** { get; }

Managed C++ public: __property **bool** get_**SupportsDictationAlternates**();

JScript public function get **SupportsDictationAlternates**() : **boolean**

Property Value

System.Boolean.

This property is read-only.

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SupportsDictationInCfgAnywhere Property

Note: This documentation is preliminary and is subject to change.

Gets a value that specifies whether the recognizer supports dictation transitions in context-free grammar recognition anywhere in the rule.

Definition

Visual Basic Public ReadOnly Property **SupportsDictationInCfgAnywhere** As **Boolean**

C# public **bool** **SupportsDictationInCfgAnywhere** { get; }

Managed C++ public: __property **bool** get_**SupportsDictationInCfgAnywhere**();

JScript public function get **SupportsDictationInCfgAnywhere**() : **boolean**

Property Value

System.Boolean.

This property is read-only.

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SupportsDiscreteRecognition Property

Note: This documentation is preliminary and is subject to change.

Gets a value that specifies whether the recognizer supports discrete recognition, which requires pauses between words.

Definition

Visual Basic Public ReadOnly Property **SupportsDiscreteRecognition** As **Boolean**

C# public **bool** **SupportsDiscreteRecognition** { get; }

Managed C++ public: __property **bool** get_**SupportsDiscreteRecognition**();

JScript public function get **SupportsDiscreteRecognition**() : **boolean**

Property Value

System.Boolean.

This property is read-only.

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SupportsHypotheses Property

Note: This documentation is preliminary and is subject to change.

Gets a value that specifies whether the recognizer supports sending hypotheses before final recognition.

Definition

Visual Basic Public ReadOnly Property **SupportsHypotheses** As **Boolean**

C# public **bool** **SupportsHypotheses** { get; }

Managed C++ public: __property **bool** get_**SupportsHypotheses**();

JScript public function get **SupportsHypotheses**() : **boolean**

Property Value

System.Boolean.

This property is read-only.

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SupportsMobileDevice Property

Note: This documentation is preliminary and is subject to change.

Gets a value that specifies whether the recognizer is tuned for use on a hand-held device.

Definition

```
Visual Basic Public ReadOnly Property SupportsMobileDevice As Boolean
C#     public bool SupportsMobileDevice { get; }
Managed C++ public: __property bool get_SupportsMobileDevice();
JScript   public function get SupportsMobileDevice() : boolean
```

Property Value

System.Boolean.

This property is read-only.

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SupportsRemoteDevice Property

Note: This documentation is preliminary and is subject to change.

Gets a value that specifies whether the recognizer is tuned to recognize audio streamed from a device to a server.

Definition

```
Visual Basic Public ReadOnly Property SupportsRemoteDevice As Boolean
C#     public bool SupportsRemoteDevice { get; }
Managed C++ public: __property bool get_SupportsRemoteDevice();
JScript   public function get SupportsRemoteDevice() : boolean
```

Property Value

System.Boolean.

This property is read-only.

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SupportsTelephony Property

Note: This documentation is preliminary and is subject to change.

Gets a value that specifies whether the recognizer supports telephony audio input.

Definition

Visual Basic Public ReadOnly Property **SupportsTelephony** As Boolean

C# public bool **SupportsTelephony** { get; }

Managed C++ public: __property bool get_**SupportsTelephony**();

JScript public function get **SupportsTelephony**() : boolean

Property Value

System.Boolean.

This property is read-only.

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SupportsTrailingDictationInCfg Property

Note: This documentation is preliminary and is subject to change.

Gets a value that specifies whether the recognizer supports dictation in context-free grammar recognition anywhere in the rule.

Definition

Visual Basic Public ReadOnly Property **SupportsTrailingDictationInCfg** As Boolean

C# public bool **SupportsTrailingDictationInCfg** { get; }

Managed C++ public: __property bool get_**SupportsTrailingDictationInCfg**();

JScript public function get **SupportsTrailingDictationInCfg**() : boolean

Property Value

System.Boolean.

This property is read-only.

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SupportsTrailingWildcardInCfg Property

Note: This documentation is preliminary and is subject to change.

Gets a value that specifies whether the recognizer supports wildcard transitions in context-free grammar recognition at the end of the rule.

Definition

Visual Basic Public ReadOnly Property **SupportsTrailingWildcardInCfg** As Boolean

```
C#     public bool SupportsTrailingWildcardInCfg { get; }
```

Managed C++ public: property **bool** get_SupportsTrailingWildcardInCfg();

JScript public function get SupportsTrailingWildcardInCfg() : **boolean**

Property Value

System.Boolean.

This property is read-only.

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SupportsTrailingWordSequences Property

Note: This documentation is preliminary and is subject to change.

Gets a value that specifies whether the recognizer supports word sequences in context-free grammar recognition at the end of the rule.

Definition

Visual Basic Public ReadOnly Property **SupportsTrailingWordSequences** As Boolean

```
C#     public bool SupportsTrailingWordSequences { get; }
```

Managed C++ public: property **bool** get_SupportsTrailingWordSequences();

JScript public function get SupportsTrailingWordSequences() : **boolean**

Property Value

System.Boolean.

This property is read-only.

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SupportsWildcardInCfgAnywhere Property

Note: This documentation is preliminary and is subject to change.

Gets a value that specifies whether the recognizer supports wildcard transitions in context-free grammar recognition anywhere in the rule.

Definition

Visual Basic Public ReadOnly Property SupportsWildcardInCfgAnywhere As Boolean
C# public bool SupportsWildcardInCfgAnywhere { get; }
Managed C++ public: __property bool get_SupportsWildcardInCfgAnywhere();
JScript public function get SupportsWildcardInCfgAnywhere() : boolean

Property Value

System.Boolean.

This property is read-only.

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SupportsWordSequencesAnywhere Property

Note: This documentation is preliminary and is subject to change.

Gets a value that specifies whether the recognizer supports word sequences in context-free grammar recognition anywhere in the rule.

Definition

Visual Basic Public ReadOnly Property SupportsWordSequencesAnywhere As Boolean
C# public bool SupportsWordSequencesAnywhere { get; }
Managed C++ public: __property bool get_SupportsWordSequencesAnywhere();

JScript public function **SupportsWordSequencesAnywhere()** : boolean

Property Value

System.Boolean.

This property is read-only.

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Vendor Property

Note: This documentation is preliminary and is subject to change.

Gets the company name of the vendor that authored the recognizer.

Definition

Visual Basic Public ReadOnly Property **Vendor** As String

C# public string **Vendor** { get; }

Managed C++ public: __property String* **get_Vendor()**;

JScript public function **Vendor()** : String

Property Value

System.String.

This property is read-only.

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RecognizerProperties Class

Note: This documentation is preliminary and is subject to change.

Represents recognizer properties that are adjustable at runtime.

Definition

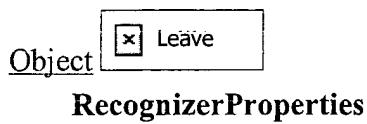
Visual Basic Public Class **RecognizerProperties**
Inherits Object

C# public class **RecognizerProperties** : Object

Managed C++ public __gc class **RecognizerProperties** : public *Object*
JScript public class **RecognizerProperties** extends *Object*

Members Table

Inheritance Hierarchy



Class Information

Namespace System.Speech.Recognition
Assembly System.Speech (system.speech.dll)
Strong Name System.Speech, Version=6.0.4044.0, Culture=neutral,
 PublicKeyToken=365143bb27e7ac8b

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GetProperty Method

Note: This documentation is preliminary and is subject to change.

Gets a property from the underlying recognizer object.

Definition

Visual Basic Public Function **GetProperty**(
 ByVal *propertyName* As **String** _
) As **Object**
C# public **object** **GetProperty**(
string *propertyName*
);
 public: **Object*** **GetProperty**(
Managed C++ **String*** *propertyName*
);
JScript public function **GetProperty**(
propertyName : **String**
) : **Object**;

Parameters

propertyName **System.String**. The Name of the property to get

Return Value

System.Object.

The value of the property

Remarks

If the underlying Recognizer does not support this property, an exception will be thrown. The property is returned as an object, since the property can either be a string or a long. It is up to the caller to convert this object into the appropriate type (e.g. long l = GetProperty ("foo") as long;)

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SetProperty Method

Note: This documentation is preliminary and is subject to change.

Sets a property on the underlying recognizer object.

Overload List

```
public Void SetProperty (String, String)  
public Void SetProperty (String, Int32)
```

Remarks

If the underlying Recognizer does not support this property, an exception will be thrown.

If the underlying Recognizer does not support this property, an exception will be thrown.

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ComplexResponseSpeed Property

Note: This documentation is preliminary and is subject to change.

Gets and sets the amount of time in milliseconds that defines the end of a recognition, when the recognition is ambiguous.

Definition

Visual Basic Public Property **ComplexResponseSpeed** As **TimeSpan**

C# public **TimeSpan** ComplexResponseSpeed { get; set; }

Managed C++ public: __property **TimeSpan** get_ComplexResponseSpeed();
public: __property void set_ComplexResponseSpeed(**TimeSpan**);

JScript public function get ComplexResponseSpeed() : **TimeSpan**
public function set ComplexResponseSpeed(**TimeSpan**);

Property Value

System.TimeSpan.

This property is read/write.

Remarks

This attribute is used when the recognition is ambiguous. For example, in the case of a CFG which has two sentences: 1) new game please and 2) new game, an ambiguous recognition would be new game. This property's value must be greater than the ResponseSpeed value. If the underlying Recognizer does not support this property, an exception will be thrown.

Range: 0 - 10,000 ms, default 500 ms

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HighConfidenceThreshold Property

Note: This documentation is preliminary and is subject to change.

Gets and sets the boundary between the high and medium confidence range.

Definition

Visual Basic Public Property **HighConfidenceThreshold** As **Integer**

C# public **int** HighConfidenceThreshold { get; set; }

Managed C++ public: __property **int** get_HighConfidenceThreshold();
public: __property void set_HighConfidenceThreshold(**int**);

JScript public function get HighConfidenceThreshold() : **int**
public function set HighConfidenceThreshold(**int**);

Property Value

System.Int32.

This property is read/write.

Remarks

The location of the low confidence, normal confidence, and high confidence markers control how the confidence of a word is labeled. The HighConfidenceThreshold (HCT) separates the high and medium confidence range. The NormalConfidenceThreshold (NCT) separates the medium and the low confidence thresholds. The LowConfidenceThreshold (LCT) separates the low and rejected confidence range. If the all three confidences are equal to 0, then all words will have high confidence. If all three confidences are equal to 100, then all words will have low confidence. If the underlying Recognizer does not support this property, an exception will be thrown. Range: 0 - 100, default 80

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IsAdaptationOn Property

Note: This documentation is preliminary and is subject to change.

Gets and sets a value that indicates whether the recognition engine should adapt the acoustic model.

Definition

Visual Basic Public Property **IsAdaptationOn** As **Boolean**

C# public **bool** **IsAdaptationOn** { get; set; }

Managed C++ public: **__property bool** **get_IsAdaptationOn()**;

public: **__property void** **set_IsAdaptationOn(**bool**)**;

JScript public function **get IsAdaptationOn()** : **boolean**
public function **set IsAdaptationOn(**boolean**)**;

Property Value

System.Boolean.

This property is read/write.

Remarks

If the underlying Recognizer does not support this property, an exception will be thrown.

Default: true

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LowConfidenceThreshold Property

Note: This documentation is preliminary and is subject to change.

Gets and sets the boundary between the low and rejected confidence range.

Definition

Visual Basic Public Property **LowConfidenceThreshold** As Integer
C# public int **LowConfidenceThreshold** { get; set; }
Managed C++ public: __property int get_LowConfidenceThreshold();
public: __property void set_LowConfidenceThreshold(int);
JScript public function get **LowConfidenceThreshold()** : int
public function set **LowConfidenceThreshold(int)**;

Property Value

System.Int32.

This property is read/write.

Remarks

The location of the low confidence, normal confidence, and high confidence markers control how the confidence of a word is labeled. The HighConfidenceThreshold (HCT) separates the high and medium confidence range. The NormalConfidenceThreshold (NCT) separates the medium and the low confidence thresholds. The LowConfidenceThreshold (LCT) separates the low and rejected confidence range. If the all three confidences are equal to 0, then all words will have high confidence. If all three confidences are equal to 100, then all words will have low confidence. If the underlying Recognizer does not support this property, an exception will be thrown. Range: 0 - 100, default 20

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NormalConfidenceThreshold Property

Note: This documentation is preliminary and is subject to change.

Gets and sets the boundary between the medium and low confidence range.

Definition

Visual Basic Public Property **NormalConfidenceThreshold** As Integer
C# public int **NormalConfidenceThreshold** { get; set; }
Managed C++ public: __property int get_NormalConfidenceThreshold();
public: __property void set_NormalConfidenceThreshold(int);
JScript public function get **NormalConfidenceThreshold()** : int
public function set **NormalConfidenceThreshold(int)**;

Property Value**System.Int32.**

This property is read/write.

Remarks

The location of the low confidence, normal confidence, and high confidence markers control how the confidence of a word is labeled. The HighConfidenceThreshold (HCT) separates the high and medium confidence range. The NormalConfidenceThreshold (NCT) separates the medium and the low confidence thresholds. The LowConfidenceThreshold (LCT) separates the low and rejected confidence range. If the all three confidences are equal to 0, then all words will have high confidence. If all three confidences are equal to 100, then all words will have low confidence. If the underlying Recognizer does not support this property, an exception will be thrown. Range: 0 - 100, default 50

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ResourceUsage Property

Note: This documentation is preliminary and is subject to change.

Gets and sets CPU resource consumption. As resource usage increases, so does the use of CPU resources.

Definition

Visual Basic Public Property **ResourceUsage** As **Integer**
C# public **int** **ResourceUsage** { get; set; }
Managed C++ public: **property int** **get_ResourceUsage();**
 public: **property void** **set_ResourceUsage(**int**);**
JScript public function **get ResourceUsage()** : **int**
 public function **set ResourceUsage(**int**);**

Property Value**System.Int32.**

This property is read/write.

Remarks

If the underlying Recognizer does not support this property, an exception is thrown. Range: 0 - 100, default 50.

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ResponseSpeed Property

Note: This documentation is preliminary and is subject to change.

Gets and sets the amount of time in milliseconds that defines the end of a recognition, when the recognition is not ambiguous.

Definition

Visual Basic Public Property **ResponseSpeed** As **TimeSpan**

C# public **TimeSpan** **ResponseSpeed** { get; set; }

Managed C++ public: __property **TimeSpan** get_**ResponseSpeed**();
public: __property void set_**ResponseSpeed**(**TimeSpan**);

JScript public function get **ResponseSpeed**() : **TimeSpan**
public function set **ResponseSpeed**(**TimeSpan**);

Property Value

System.TimeSpan.

This property is read/write.

Remarks

This attribute is used when the recognition is not ambiguous. For example, in the case of a context-free grammar (CFG) which has two sentences: 1) new game please and 2) new game, a non-ambiguous recognition would be new game please. If the underlying Recognizer does not support this property, an exception will be thrown. Range: 0 - 10,000 ms, default 150 ms

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Recognizers Class

Note: This documentation is preliminary and is subject to change.

Represents a collection of speech recognizers.

Definition

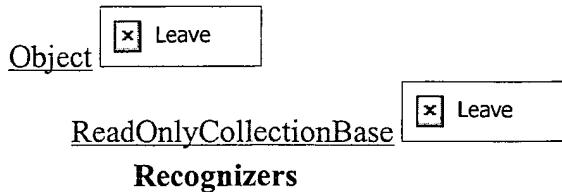
Visual Basic Public Class **Recognizers**

Inherits ReadOnlyCollectionBase

C# public class **Recognizers** : ReadOnlyCollectionBase
Managed C++ public __gc class **Recognizers** : public ReadOnlyCollectionBase
JScript public class **Recognizers** extends ReadOnlyCollectionBase

Members Table

Inheritance Hierarchy



Remarks

This class can't be created directly, but is obtained from the static AvailableRecognizers fields or GetAvailableRecognizers method.

Class Information

Namespace System.Speech.Recognition
Assembly System.Speech (system.speech.dll)
Strong Name System.Speech, Version=6.0.4044.0, Culture=neutral,
 PublicKeyToken=365143bb27e7ac8b

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AvailableRecognizers Property

Note: This documentation is preliminary and is subject to change.

Gets the attributes of all the recognizers that are installed on the system.

Definition

Visual Basic Public Shared ReadOnly Property AvailableRecognizers As Recognizers
C# public static Recognizers AvailableRecognizers { get; }
Managed C++ public: __property static Recognizers* get_AvailableRecognizers();
JScript public static function get AvailableRecognizers() : Recognizers

Property Value

System.Speech.Recognition.Recognizers.

This property is read-only.

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Item Property

Note: This documentation is preliminary and is subject to change.

Gets the specified attribute.

Definition

```
Visual Basic  Public ReadOnly Property Item( _  
           ByVal index As Integer _  
           ) As RecognizerAttributes  
           public RecognizerAttributes this[  
           C#           int index  
           ] { get; }  
           public: __property RecognizerAttributes* get_Item(  
Managed C++  int index  
           );  
JScript     In JScript, you can use indexed properties, but you cannot define your own.
```

Property Value

System.Speech.Recognition.RecognizerAttributes.

This property is read-only.

Parameters

index **System.Int32**. The zero-based index of the desired attribute.

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RecognizerStateChangedEventArgs Class

Note: This documentation is preliminary and is subject to change.

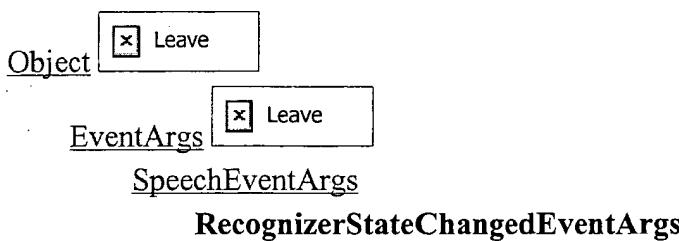
Provides data for the RecognizerStateChanged event.

Definition

Visual Basic Public Class **RecognizerStateChangedEventArgs**
Basic Inherits SpeechEventArgs
C# public class **RecognizerStateChangedEventArgs** : SpeechEventArgs
Managed public __gc
C++ class **RecognizerStateChangedEventArgs** : public SpeechEventArgs
JScript public class **RecognizerStateChangedEventArgs** extends SpeechEventArgs

Members Table

Inheritance Hierarchy



Class Information

Namespace System.Speech.Recognition
Assembly System.Speech (system.speech.dll)
Strong Name System.Speech, Version=6.0.4044.0, Culture=neutral,
 PublicKeyToken=365143bb27e7ac8b

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RecognizerStateChangedEventArgs Method

Note: This documentation is preliminary and is subject to change.

Initializes a new instance of the **RecognizerStateChangedEventArgs** class.

Definition

Visual Basic Public Sub **RecognizerStateChangedEventArgs**(
 ByVal *audioPosition* As TimeSpan,
 ByVal *state* As RecognizerState)
C# public **RecognizerStateChangedEventArgs**(
 TimeSpan *audioPosition*,
 RecognizerState *state*);

```
public: RecognizerStateChangedEventArgs(  
Managed C++  TimeSpan audioPosition,  
           RecognizerState state  
           );  
public function RecognizerStateChangedEventArgs(  
JScript      audioPosition : TimeSpan,  
           state : RecognizerState  
           );
```

Parameters

audioPosition **System.TimeSpan**. Placeholder
state **System.Speech.Recognition.RecognizerState**.

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State Property

Note: This documentation is preliminary and is subject to change.

Gets the updated audio state.

Definition

Visual Basic Public ReadOnly Property **State** As RecognizerState

C# public RecognizerState **State** { get; }

Managed C++ public: __property RecognizerState get_State();

JScript public function get **State()** : RecognizerState

Property Value

System.Speech.Recognition.RecognizerState.

This property is read-only.

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Rule Class

Note: This documentation is preliminary and is subject to change.

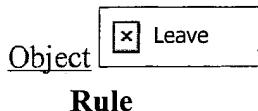
Represents a grammar rule.

Definition

Visual Basic Public Class **Rule**
 Inherits Object
C# public class **Rule** : Object
Managed C++ public __gc class **Rule** : public Object
JScript public class **Rule** extends Object

Members Table

Inheritance Hierarchy



Class Information

Namespace System.Speech.Recognition
Assembly System.Speech (system.speech.dll)
Strong Name System.Speech, Version=6.0.4044.0, Culture=neutral,
 PublicKeyToken=365143bb27e7ac8b

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Rule Method

Note: This documentation is preliminary and is subject to change.

Initializes a new instance of the Rule class.

Definition

Visual Basic Public Sub **Rule()**
C# public **Rule()**;
Managed C++ public: **Rule()**;
JScript public function **Rule()**;

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IsActive Property

Note: This documentation is preliminary and is subject to change.

Gets or sets the state of a grammar rule.

Definition

Visual Basic Public Property **IsActive** As **Boolean**

C# public **bool** **IsActive** { get; set; }

Managed C++ public: __property **bool** get_IsActive();
public: __property void set_IsActive(bool);

JScript public function get IsActive() : **boolean**
public function set IsActive(boolean);

Property Value

System.Boolean.

This property is read/write.

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Name Property

Note: This documentation is preliminary and is subject to change.

Gets the name of the rule.

Definition

Visual Basic Public ReadOnly Property **Name** As **String**

C# public **string** **Name** { get; }

Managed C++ public: __property **String*** get_Name();

JScript public function get Name() : **String**

Property Value

System.String.

This property is read-only.

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RuleCollection Class

Note: This documentation is preliminary and is subject to change.

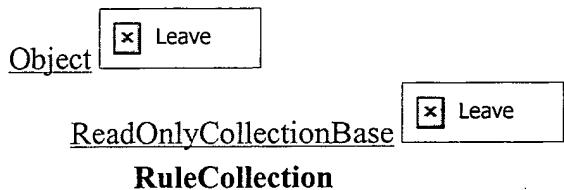
Represents a collection of Rules.

Definition

Visual Basic	Public Class RuleCollection Inherits <i>ReadOnlyCollectionBase</i>
C#	public class RuleCollection : <i>ReadOnlyCollectionBase</i>
Managed C++	public __gc class RuleCollection : public <i>ReadOnlyCollectionBase</i>
JScript	public class RuleCollection extends <i>ReadOnlyCollectionBase</i>

Members Table

Inheritance Hierarchy



Class Information

Namespace	System.Speech.Recognition
Assembly	System.Speech (system.speech.dll)
Strong Name	System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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get Item Method

Note: This documentation is preliminary and is subject to change.

Overload List

```
public Rule get_Item (String)  
public Rule get_Item (Int32)
```

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Item Property

Note: This documentation is preliminary and is subject to change.

Gets the specified rule.

Overload List

```
public Rule Item (Int32)  
public Rule Item (String)
```

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SemanticProperty Class

Note: This documentation is preliminary and is subject to change.

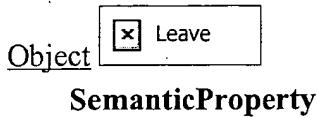
Represents a single semantic property that may contain additional levels of semantic information.

Definition

Visual Basic	Public Class SemanticProperty Inherits <i>Object</i>
C#	public class SemanticProperty : <i>Object</i>
Managed C++	public __gc class SemanticProperty : public <i>Object</i>
JScript	public class SemanticProperty extends <i>Object</i>

Members Table

Inheritance Hierarchy



Class Information

Namespace	System.Speech.Recognition
Assembly	System.Speech (system.speech.dll)
Strong Name	System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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Confidence Property

Note: This documentation is preliminary and is subject to change.

Gets the confidence score information relating to the semantic property.

Definition

Visual Basic Public ReadOnly Property **Confidence** As [Confidence](#)

C# public [Confidence](#) Confidence { get; }

Managed C++ public: __property [Confidence](#) get_Confidence();

JScript public function get Confidence() : [Confidence](#)

Property Value

System.Speech.Recognition.Confidence.

This property is read-only.

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Name Property

Note: This documentation is preliminary and is subject to change.

Gets the name of this semantic property.

Definition

Visual Basic Public ReadOnly Property **Name** As [String](#)

C# public [string](#) Name { get; }

Managed C++ public: __property [String](#)* get_Name();

JScript public function get Name() : [String](#)

Property Value

System.String.

This property is read-only.

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Properties Property

Note: This documentation is preliminary and is subject to change.

Gets the collection of child semantic properties of this property.

Definition

Visual Basic Public ReadOnly Property **Properties** As SemanticPropertyCollection

C# public SemanticPropertyCollection **Properties** { get; }

Managed C++ public: __property SemanticPropertyCollection* get_**Properties**();

JScript public function get **Properties**() : SemanticPropertyCollection

Property Value

System.Speech.Recognition.SemanticPropertyCollection.

This property is read-only.

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RecognizerConfidence Property

Note: This documentation is preliminary and is subject to change.

Gets the confidence value for this semantic property computed by the speech recognition engine.

Definition

Visual Basic Public ReadOnly Property **RecognizerConfidence** As Single

C# public float **RecognizerConfidence** { get; }

Managed C++ public: __property float get_**RecognizerConfidence**();

JScript public function get **RecognizerConfidence**() : float

Property Value

System.Single.

This property is read-only.

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Text Property

Note: This documentation is preliminary and is subject to change.

Gets the text of this semantic property.

Definition

Visual Basic Public ReadOnly Property **Text** As **String**

C# public **string** **Text** { get; }

Managed C++ public: **property String*** **get_Text()**;

JScript public function **get Text()** : **String**

Property Value

System.String.

This property is read-only.

Remarks

For example, for the Solitaire PlayCard rule, the Text for the Rank property may be "ace", "two", "three", etc.

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Tokens Property

Note: This documentation is preliminary and is subject to change.

Gets the tokens that correspond to this semantic property.

Definition

Visual Basic Public ReadOnly Property **Tokens** As **SpokenTokenCollection**

C# public **SpokenTokenCollection** **Tokens** { get; }

Managed C++ public: **property SpokenTokenCollection*** **get_Tokens()**;

JScript public function **get Tokens()** : **SpokenTokenCollection**

Property Value

System.Speech.Recognition.SpokenTokenCollection.

This property is read-only.

Remarks

For example, for the Solitaire PlayCard rule, the Tokens collection for the Rank property probably just contains one token, and it could contain "ace", "two", "three", etc.

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Value Property

Note: This documentation is preliminary and is subject to change.

Gets the value of this semantic property.

Definition

Visual Basic Public ReadOnly Property **Value** As Object

C# public object **Value** { get; }

Managed C++ public: __property Object* **get_Value()**;

JScript public function **get Value()** : Object

Property Value**System.Object.**

This property is read-only.

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SemanticPropertyCollection Class

Note: This documentation is preliminary and is subject to change.

Represents a collection of semantic properties.

Definition

Visual Basic Public Class **SemanticPropertyCollection**

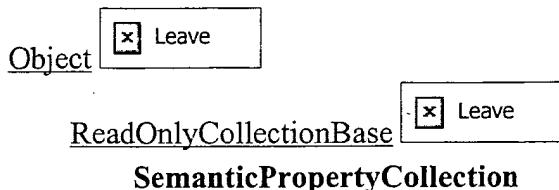
Basic Inherits ReadOnlyCollectionBase

C# public class **SemanticPropertyCollection** : ReadOnlyCollectionBase

Managed public __gc
C++ class **SemanticPropertyCollection** : public *ReadOnlyCollectionBase*
JScript public class **SemanticPropertyCollection** extends *ReadOnlyCollectionBase*

Members Table

Inheritance Hierarchy



Class Information

Namespace System.Speech.Recognition
Assembly System.Speech (system.speech.dll)
Strong Name System.Speech, Version=6.0.4044.0, Culture=neutral,
PublicKeyToken=365143bb27e7ac8b

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get_Item Method

Note: This documentation is preliminary and is subject to change.

Overload List

public SemanticProperty get_Item (String)
public SemanticProperty get_Item (Int32)

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Item Property

Note: This documentation is preliminary and is subject to change.

Gets the specified SemanticProperty.

Overload List

```
public SemanticProperty Item (Int32)
public SemanticProperty Item (String)
```

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SpeechEventArgs Class

Note: This documentation is preliminary and is subject to change.

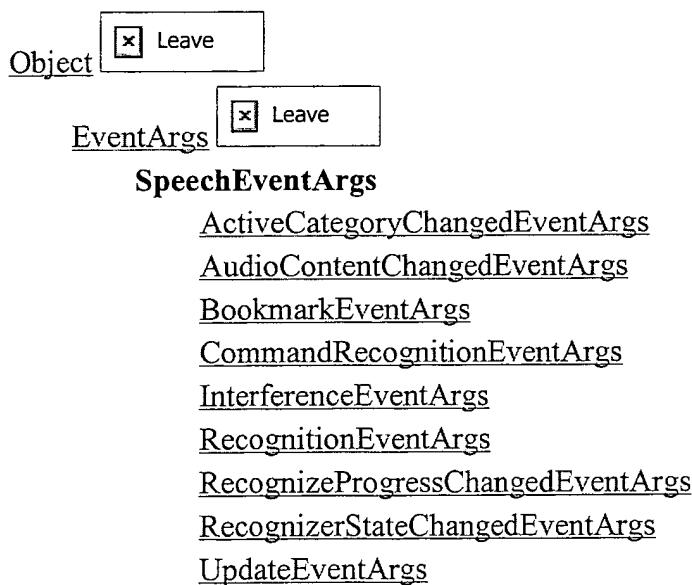
Provides data for these events: NoRecognition, AudioLevelChanged, RecognitionStarted, RecognitionStopped, RecognitionCanceled, RecognitionPaused, and RecognitionResumed.

Definition

```
Visual Basic  Public Class SpeechEventArgs
                  Inherits EventArgs
C#           public class SpeechEventArgs : EventArgs
Managed C++ public __gc class SpeechEventArgs : public EventArgs
JScript       public class SpeechEventArgs extends EventArgs
```

Members Table

Inheritance Hierarchy



Class Information

Namespace System.Speech.Recognition
Assembly System.Speech (system.speech.dll)

Strong Name System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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SpeechEventArgs Method

Note: This documentation is preliminary and is subject to change.

Initializes a new instance of the SpeechEventArgs class.

Definition

```
Visual Basic  Public Sub SpeechEventArgs( _  
                 ByVal audioPosition As TimeSpan _  
                 )  
               public SpeechEventArgs(  
                 TimeSpan audioPosition  
               );  
               public: SpeechEventArgs(  
                 TimeSpan audioPosition  
               );  
               public function SpeechEventArgs(  
                 audioPosition : TimeSpan  
               );
```

```
Managed C++  
JScript
```

Parameters

audioPosition **System.TimeSpan**. Placeholder

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AudioPosition Property

Note: This documentation is preliminary and is subject to change.

Gets the time the event occurred, relative to the start of the stream.

Definition

```
Visual Basic  Public ReadOnly Property AudioPosition As TimeSpan  
C#      public TimeSpan AudioPosition { get; }
```

Managed C++ public: __property TimeSpan get_AudioPosition();
JScript public function get **AudioPosition()** : TimeSpan

Property Value

System.TimeSpan.

This property is read-only.

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SpokenToken Class

Note: This documentation is preliminary and is subject to change.

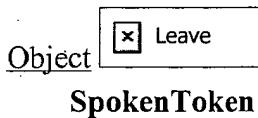
Represents a token, in western languages this is typically a word , that was recognized by the speech recognizer.

Definition

Visual Basic Public Class **SpokenToken**
Inherits Object
C# public class **SpokenToken** : Object
Managed C++ public __gc class **SpokenToken** : public Object
JScript public class **SpokenToken** extends Object

Members Table

Inheritance Hierarchy



Class Information

Namespace System.Speech.Recognition
Assembly System.Speech (system.speech.dll)
Strong Name System.Speech, Version=6.0.4044.0, Culture=neutral,
PublicKeyToken=365143bb27e7ac8b

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ToString Method

Note: This documentation is preliminary and is subject to change.

Gets the spoken text of the token.

Definition

Visual Basic Overrides Public Function **ToString()** As **String**

C# public override **string** **ToString()**;

Managed C++ public: **String*** **ToString()**;

JScript public override function **ToString()** : **String**;

Return Value

System.String.

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Audio Property

Note: This documentation is preliminary and is subject to change.

Gets the captured audio that corresponds to this recognized token.

Definition

Visual Basic Public ReadOnly Property **Audio** As **RecognitionAudio**

C# public **RecognitionAudio** **Audio** { get; }

Managed C++ public: __property **RecognitionAudio*** get_**Audio()**;

JScript public function get **Audio()** : **RecognitionAudio**

Property Value

System.Speech.Recognition.RecognitionAudio.

This property is read-only.

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Confidence Property

Note: This documentation is preliminary and is subject to change.

Gets confidence score information that expresses how confident the speech recognizer is that this is the correct token.

Definition

Visual Basic Public ReadOnly Property **Confidence** As Confidence

C# public Confidence **Confidence** { get; }

Managed C++ public: __property Confidence get_ **Confidence**();

JScript public function get **Confidence**() : Confidence

Property Value

System.Speech.Recognition.Confidence.

This property is read-only.

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PronunciationString Property

Note: This documentation is preliminary and is subject to change.

Gets the pronunciation of the token in string form.

Definition

Visual Basic Public ReadOnly Property **PronunciationString** As String

C# public string **PronunciationString** { get; }

Managed C++ public: __property String* get_ **PronunciationString**();

JScript public function get **PronunciationString**() : String

Property Value

System.String.

This property is read-only.

Remarks

String could also be returned in SAPI phone ids. In addition could do a conversion to IPA phones for consistency across languages (new feature work).

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RecognizerConfidence Property

Note: This documentation is preliminary and is subject to change.

Gets confidence score information that expresses how confident the speech recognizer is that this is the correct token.

Definition

Visual Basic Public ReadOnly Property **RecognizerConfidence** As Single

C# public float **RecognizerConfidence** { get; }

Managed C++ public: __property float get_RecognizerConfidence();

JScript public function get **RecognizerConfidence()** : float

Property Value

System.Single.

This property is read-only.

Remarks

This value is not standardized across multiple speech Recognizers and can even change from version to version of a specific recognizer.

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Text Property

Note: This documentation is preliminary and is subject to change.

Gets the spoken text of the token.

Definition

Visual Basic Public ReadOnly Property **Text** As String

C# public string **Text** { get; }

Managed C++ public: __property String* get_Text();

JScript public function get **Text()** : String

Property Value

System.String.

This property is read-only.

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SpokenTokenCollection Class

Note: This documentation is preliminary and is subject to change.

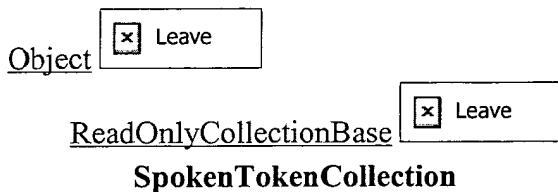
Represents a collection of recognized tokens.

Definition

Visual Basic	Public Class SpokenTokenCollection Inherits <i>ReadOnlyCollectionBase</i>
C#	public class SpokenTokenCollection : <i>ReadOnlyCollectionBase</i>
Managed	public __gc
C++	class SpokenTokenCollection : public <i>ReadOnlyCollectionBase</i>
JScript	public class SpokenTokenCollection extends <i>ReadOnlyCollectionBase</i>

Members Table

Inheritance Hierarchy



Class Information

Namespace	System.Speech.Recognition
Assembly	System.Speech (system.speech.dll)
Strong Name	System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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GetAlternates Method

Note: This documentation is preliminary and is subject to change.

Gets a collection of alternates specified by a range of tokens in the result.

Overload List

```
public RecognitionPhraseAlternateCollection GetAlternates (Int32, Int32)
public RecognitionPhraseAlternateCollection GetAlternates (Int32, Int32, Int32)
```

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GetAudio Method

Note: This documentation is preliminary and is subject to change.

Gets the captured audio that corresponds to the specified range of tokens in this collection.

Definition

Visual Basic	Public Function GetAudio(ByVal <i>firstToken</i> As <u>Integer</u> , ByVal <i>countOfTokens</i> As <u>Integer</u>) As <u>RecognitionAudio</u>
C#	public <u>RecognitionAudio</u> GetAudio(int <i>firstToken</i> , int <i>countOfTokens</i>);
Managed C++	public: <u>RecognitionAudio</u> * GetAudio(int <i>firstToken</i> , int <i>countOfTokens</i>);
JScript	public function GetAudio(<i>firstToken</i> : <u>int</u> , <i>countOfTokens</i> : <u>int</u>) : <u>RecognitionAudio</u> ;

Parameters

firstToken **System.Int32**. The first token to consider
countOfTokens **System.Int32**. The number of tokens to consider

Return Value

System.Speech.Recognition.RecognitionAudio.

An instance of the `RecognitionAudio` class that represents the captured audio

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GetText Method

Note: This documentation is preliminary and is subject to change.

Gets the text that the specified range of tokens represents.

Definition

```
Public Function GetText(  
    ByVal firstToken As Integer,  
    ByVal countOfTokens As Integer  
) As String  
public string GetText(  
    int firstToken,  
    int countOfTokens  
);  
public: String* GetText(  
    int firstToken,  
    int countOfTokens  
);  
public function GetText(  
    firstToken : int,  
    countOfTokens : int  
) : String;
```

Parameters

firstToken **System.Int32**. The first token to consider
countOfTokens **System.Int32**. The number of tokens to consider

Return Value

System.String.

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Audio Property

Note: This documentation is preliminary and is subject to change.

Gets the captured audio that corresponds to this collection of recognized tokens.

Definition

Visual Basic Public ReadOnly Property **Audio** As RecognitionAudio

C# public RecognitionAudio **Audio** { get; }

Managed C++ public: __property RecognitionAudio* get_Audio();

JScript public function get **Audio**() : RecognitionAudio

Property Value

System.Speech.Recognition.RecognitionAudio.

This property is read-only.

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Item Property

Note: This documentation is preliminary and is subject to change.

Gets the token at the specified position.

Definition

Public ReadOnly Property **Item**(_

Visual Basic ByVal *index* As Integer _
) As SpokenToken

public SpokenToken **this**[

C# int *index*

] { get; }

public: __property SpokenToken* get_Audio(

Managed C++ int *index*
);

JScript In JScript, you can use indexed properties, but you cannot define your own.

Property Value

System.Speech.Recognition.SpokenToken.

This property is read-only.

Parameters

index **System.Int32.**

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Text Property

Note: This documentation is preliminary and is subject to change.

Gets the text that this collection of token represents.

Definition

Visual Basic Public ReadOnly Property **Text** As **String**

C# public **string** **Text** { **get**; }

Managed C++ public: **__property** **String*** **get_Text()**;

JScript public function **get Text()** : **String**

Property Value

System.String.

This property is read-only.

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SystemRecognizer Class

Note: This documentation is preliminary and is subject to change.

Represents the shared recognizer.

Definition

Public Class **SystemRecognizer**

Visual Basic Inherits **Object**

Implements **IDisposable**, **IRecognizer**

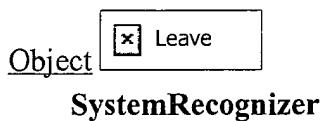
C# public class **SystemRecognizer** : **Object**,
IDisposable, **IRecognizer**

Managed C++ public __gc class **SystemRecognizer** : public **Object**,
IDisposable, **IRecognizer**

JScript public class **SystemRecognizer** extends **Object**
implements **IRecognizer**, **IDisposable**

Members Table

Inheritance Hierarchy



Examples

The following code example creates a SystemRecognizer object and adds delegates to events.

```
private void SpeechRecognition_Load(object sender, EventArgs e)      {      //
```

Class Information

Namespace System.Speech.Recognition
Assembly System.Speech (system.speech.dll)
Strong Name System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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AdaptLanguageModel Method

Note: This documentation is preliminary and is subject to change.

Passes a specified string to the recognition engine for use in adapting the active language models.

Overload List

```
public Void AdaptLanguageModel (String)
public Void AdaptLanguageModel (String[])
public Void AdaptLanguageModel (String, String, AdaptationSettings, AdaptationRelevance)
public Void AdaptLanguageModel (String
[], String, AdaptationSettings, AdaptationRelevance)
```

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Dispose Method

Note: This documentation is preliminary and is subject to change.

Releases the unmanaged resources used by the SystemRecognizer class.

Definition

```
Visual Basic Public Sub Dispose()
C#     public void Dispose();
Managed C++ public: void Dispose();
JScript    public function Dispose(): void;
```

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EmulateRecognize Method

Note: This documentation is preliminary and is subject to change.

Simulates a speech recognition event by assuming that a specified string was spoken by the user.

Overload List

```
public Void EmulateRecognize (String)
public Void EmulateRecognize (String, CompareOptions)
public Void EmulateRecognize (String[])
public Void EmulateRecognize (String[], CompareOptions)
```

Examples

The following code example emulates the recognition of emulateTextBox.

```
private void EmulateButton_Click(object sender, EventArgs e)      {      if (em
Private Sub EmulateButton_Click(ByVal sender As Object, ByVal e As EventArgs) H
```

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InsertBookmark Method

Note: This documentation is preliminary and is subject to change.

Sets a bookmark at a specified stream position, and fires the Bookmark event.

Definition

```
Visual Basic Public Sub InsertBookmark( _
    ByVal streamTimeToDoBookmark As TimeSpan, _
```

```

        ByVal tag As Object _
    )
    public void InsertBookmark(
        TimeSpan streamTimeToDoBookmark,
        object tag
    );
    public: void InsertBookmark(
        TimeSpan streamTimeToDoBookmark,
        Object* tag
    );
    public function InsertBookmark(
        streamTimeToDoBookmark : TimeSpan,
        tag : Object
    ) : void;

```

Parameters

streamTimeToDoBookmark System.TimeSpan.
tag System.Object.

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InsertBookmarkAhead Method

Note: This documentation is preliminary and is subject to change.

Sets a bookmark at a specified amount of time ahead of the current audio position, and fires the Bookmark event.

Definition

```

    Public Sub InsertBookmarkAhead(
        ByVal timeAheadToDoBookmark As TimeSpan,
        ByVal tag As Object _
    )
    public void InsertBookmarkAhead(
        TimeSpan timeAheadToDoBookmark,
        object tag
    );
    public: void InsertBookmarkAhead(
        TimeSpan timeAheadToDoBookmark,
        Object* tag
    );
    public function InsertBookmarkAhead(
        timeAheadToDoBookmark : TimeSpan,

```

```
    tag : Object  
    ) : void;
```

Parameters

<i>timeAheadToDoBookmark</i>	System.TimeSpan .
<i>tag</i>	System.Object .

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RequestUpdate Method

Note: This documentation is preliminary and is subject to change.

Requests an update as soon as the engine can accept it. The system will fire the Update event once the recognizer is ready to receive updates.

Overload List

```
public Void RequestUpdate ()  
public Void RequestUpdate (Object)  
public Void RequestUpdate (TimeSpan, Object)
```

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RequestUpdateAhead Method

Note: This documentation is preliminary and is subject to change.

Requests an update as soon as the engine can accept it. The system will fire the Update event once the recognizer is ready to receive updates.

Definition

```
Visual Basic  Public Sub RequestUpdateAhead(  
    ByVal timeAheadToDoUpdate As TimeSpan,  
    ByVal tag As Object  
)  
C#  public void RequestUpdateAhead(  
    TimeSpan timeAheadToDoUpdate,  
    object tag  
)
```

```

        public: void RequestUpdateAhead(
    Managed C++    TimeSpan timeAheadToDoUpdate,
                    Object* tag
                );
    public function RequestUpdateAhead(
        JScript    timeAheadToDoUpdate : TimeSpan,
                    tag : Object
    ) : void;

```

Parameters

timeAheadToDoUpdate **System.TimeSpan**.
tag **System.Object**.

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SetState Method

Note: This documentation is preliminary and is subject to change.

Sets recognizer state.

Definition

```

    Public Sub SetState( _
Visual Basic    ByVal state As RecognizerState _
                    )
    public void SetState(
        C#        RecognizerState state
                    );
    public: void SetState(
Managed C++    RecognizerState state
                    );
    public function SetState(
        JScript    state : RecognizerState
                    ) : void;

```

Parameters

state **System.Speech.Recognition.RecognizerState**. State to set

Remarks

Recognizer state is set to one of two values.

SPRECOSTATE.SPRST_ACTIVE_ALWAYS Indicates the audio is running regardless of the rule state. Even if there are no active rules, audio will still be read and passed to the engine. This state can be useful for applications if they want to receive volume level events, in order to display a VU-meter or similar.

SPRST_INACTIVE The engine and audio input are inactive and no audio is being read, even if there rules active. The audio device will be closed in this state. Normally an application should not set the state to SPRST_INACTIVE because when using the shared engine, recognition will be stopped for all applications, not just this one.

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WaitForUpdate Method

Note: This documentation is preliminary and is subject to change.

Raises the Update event, and blocks the recognizer until the Update event handler finishes.

Definition

```
Visual Basic Public Sub WaitForUpdate()  
C#     public void WaitForUpdate();  
Managed C++ public: void WaitForUpdate();  
JScript   public function WaitForUpdate() : void;
```

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ActiveCategory Property

Note: This documentation is preliminary and is subject to change.

Gets and sets the active recognizer category.

Definition

```
Visual Basic Public Property ActiveCategory As Category  
C#     public Category ActiveCategory { get; set; }  
Managed C++ public: __property Category* get_ActiveCategory();  
public: __property void set_ActiveCategory(Category*);  
JScript   public function get ActiveCategory() : Category  
public function set ActiveCategory(Category);
```

Property Value

System.Speech.Recognition.Category.

This property is read/write.

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Attributes Property

Note: This documentation is preliminary and is subject to change.

Gets the collection of attributes referenced by the recognizer.

Definition

Visual Basic Public ReadOnly Property **Attributes** As [RecognizerAttributes](#)

C# public [RecognizerAttributes](#) **Attributes** { get; }

Managed C++ public: __property [RecognizerAttributes](#)* get_**Attributes**();

JScript public function get **Attributes**() : [RecognizerAttributes](#)

Property Value

System.Speech.Recognition.RecognizerAttributes.

This property is read-only.

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AudioContent Property

Note: This documentation is preliminary and is subject to change.

Returns the content of the audio stream.

Definition

Visual Basic Public ReadOnly Property **AudioContent** As [AudioContent](#)

C# public [AudioContent](#) **AudioContent** { get; }

Managed C++ public: __property [AudioContent](#) get_**AudioContent**();

JScript public function get **AudioContent**() : [AudioContent](#)

Property Value

System.Speech.Recognition.AudioContent.

This property is read-only.

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AudioPosition Property

Note: This documentation is preliminary and is subject to change.

Gets the current read or write position of the stream or device in bytes.

Definition

Visual Basic Public ReadOnly Property **AudioPosition** As **TimeSpan**
C# public **TimeSpan** **AudioPosition** { get; }
Managed C++ public: __property **TimeSpan** get_**AudioPosition**();
JScript public function get **AudioPosition()** : **TimeSpan**

Property Value

System.TimeSpan.

This property is read-only.

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EnableRejection Property

Note: This documentation is preliminary and is subject to change.

Gets a value that specifies whether the recognizer splits recognitions into those with high confidence that raise a Recognition event, and those with low confidence that raise a RejectedRecognition event. True by default. If set to false, all recognitions fire a Recognition event.

Definition

Visual Basic Public Property **EnableRejection** As **Boolean**
C# public **bool** **EnableRejection** { get; set; }
Managed C++ public: __property **bool** get_**EnableRejection**();
public: __property void set_**EnableRejection**(**bool**);
JScript public function get **EnableRejection()** : **boolean**

public function set **EnableRejection(boolean)**;

Property Value

System.Boolean.

This property is read/write.

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Grammars Property

Note: This documentation is preliminary and is subject to change.

Gets the collection of grammars referenced by the recognizer.

Definition

Visual Basic Public ReadOnly Property **Grammars** As GrammarCollection

C# public GrammarCollection Grammars { get; }

Managed C++ public: __property GrammarCollection* get_Grammars();

JScript public function get Grammars() : GrammarCollection

Property Value

System.Speech.Recognition.GrammarCollection.

This property is read-only.

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IsActive Property

Note: This documentation is preliminary and is subject to change.

Gets or sets a value that specifies whether the recognizer is active. Defaults to true.

Definition

Visual Basic Public Property **IsActive** As Boolean

C# public bool IsActive { get; set; }

Managed C++ public: __property bool get_IsActive();

JScript

```
public: __property void set_IsActive(bool);
public function get IsActive() : boolean
public function set IsActive(boolean);
```

Property Value

System.Boolean.

This property is read/write.

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Properties Property

Note: This documentation is preliminary and is subject to change.

Gets the collection of properties referenced by the recognizer.

Definition

Visual Basic Public ReadOnly Property **Properties** As RecognizerProperties
C# public RecognizerProperties **Properties** { get; }
Managed C++ public: __property RecognizerProperties* get_Properties();
JScript public function get Properties() : RecognizerProperties

Property Value

System.Speech.Recognition.RecognizerProperties.

This property is read-only.

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Recognizer Property

Note: This documentation is preliminary and is subject to change.

Definition

Visual Basic Public Shared ReadOnly Property **Recognizer** As SystemRecognizer
C# public static SystemRecognizer **Recognizer** { get; }
Managed C++ public: __property static SystemRecognizer* get_Recognizer();

JScript public static function get Recognizer() : SystemRecognizer

Property Value

System.Speech.Recognition.SystemRecognizer.

This property is read-only.

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RecognizerPosition Property

Note: This documentation is preliminary and is subject to change.

Gets the current stream position the engine has recognized to. Stream positions are measured in bytes. This value can be used to check the engine's progress using the audio data.

Definition

Visual Basic Public ReadOnly Property RecognizerPosition As TimeSpan

 C# public TimeSpan RecognizerPosition { get; }

Managed C++ public: __property TimeSpan get_RecognizerPosition();

JScript public function get RecognizerPosition() : TimeSpan

Property Value

System.TimeSpan.

This property is read-only.

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State Property

Note: This documentation is preliminary and is subject to change.

Gets the current state of the recognizer.

Definition

Visual Basic Public ReadOnly Property State As RecognizerState

 C# public RecognizerState State { get; }

Managed C++ public: __property **RecognizerState** get_State();
JScript public function get State() : **RecognizerState**

Property Value

System.Speech.Recognition.RecognizerState.

This property is read-only.

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ActiveCategoryChanged Event

Note: This documentation is preliminary and is subject to change.

Occurs when the active category is changed.

Definition

Visual Basic Public
Basic Event **ActiveCategoryChanged** As *ActiveCategoryChangedEventHandler*
C# public event *ActiveCategoryChangedEventHandler* **ActiveCategoryChanged**;
Managed C++ public: __event **ActiveCategoryChanged**;
JScript In JScript, you can use events, but you cannot define your own.

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AudioContentChanged Event

Note: This documentation is preliminary and is subject to change.

Occurs when the type of signal in the audio input changed.

Definition

Visual Basic Public
Basic Event **AudioContentChanged** As *AudioContentChangedEventHandler*
C# public event *AudioContentChangedEventHandler* **AudioContentChanged**;
Managed C++ public: __event **AudioContentChanged**;

JScript In JScript, you can use events, but you cannot define your own.

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Bookmark Event

Note: This documentation is preliminary and is subject to change.

Occurs when a bookmark is reached.

Definition

Visual Basic Public Event **Bookmark** As *BookmarkEventHandler*

C# public event *BookmarkEventHandler* **Bookmark**;

Managed C++ public: __event **Bookmark**;

JScript In JScript, you can use events, but you cannot define your own.

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Hypothesis Event

Note: This documentation is preliminary and is subject to change.

Occurs when a spoken phrase is partially recognized.

Definition

Visual Basic Public Event **Hypothesis** As *RecognitionEventHandler*

C# public event *RecognitionEventHandler* **Hypothesis**;

Managed C++ public: __event **Hypothesis**;

JScript In JScript, you can use events, but you cannot define your own.

Examples

This example handles the *Eecognition* event and displays the hypothesized result.

```
private void Recognizer_Hypothesis(object sender, RecognitionEventArgs e) {  
  
Private Sub Recognizer_Hypothesis(ByVal sender As Object, ByVal e As RecognitionEventArgs)  
    ' Your code here to handle the hypothesized result.  
End Sub
```

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InterferenceDetected Event

Note: This documentation is preliminary and is subject to change.

Occurs when the speech recognition engine encounters interference in the input audio stream preventing an optimal speech recognition experience.

Definition

Visual Basic Public Event **InterferenceDetected** As *InterferenceEventHandler*

C# public event *InterferenceEventHandler* **InterferenceDetected**;

Managed C++ public: __event **InterferenceDetected**;

JScript In JScript, you can use events, but you cannot define your own.

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NoRecognition Event

Note: This documentation is preliminary and is subject to change.

Occurs when a spoken phrase is not recognized.

Definition

Visual Basic Public Event **NoRecognition** As *RecognitionEventHandler*

C# public event *RecognitionEventHandler* **NoRecognition**;

Managed C++ public: __event **NoRecognition**;

JScript In JScript, you can use events, but you cannot define your own.

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Recognition Event

Note: This documentation is preliminary and is subject to change.

Occurs when a spoken phrase is successfully recognized.

Definition

Visual Basic Public Event **Recognition** As *RecognitionEventHandler*

C# public event *RecognitionEventHandler* **Recognition**;

Managed C++ public: __event **Recognition**;

JScript In JScript, you can use events, but you cannot define your own.

Examples

This example displays the recognition result and updates the semantics and alternates.

```
private void Recognizer_Recognition(object sender, RecognitionEventArgs e
```

This sample handles the recognition event.

```
Private Sub Recognizer_Recognition(ByVal sender As Object, ByVal e As Reco
```

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RecognizeProgressChanged Event

Note: This documentation is preliminary and is subject to change.

Occurs when the input audio volume level changes.

Definition

Visual Public

Basic Event **RecognizeProgressChanged** As *RecognizeProgressChangedEventHandler*

C# public event
 RecognizeProgressChangedEventHandler **RecognizeProgressChanged**;

Managed public: __event **RecognizeProgressChanged**;

C++

JScript In JScript, you can use events, but you cannot define your own.

Examples

This example updates the audio level meter when the recognition progress has been updated.

```
private void Recognizer_RecognizeProgressChanged(object sender, Recognize
```

```
Private Sub Recognizer_RecognizeProgressChanged(ByVal sender As Object,
```

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RecognizerStateChanged Event

Note: This documentation is preliminary and is subject to change.

Occurs when recognition starts, or stops; or when recognition is canceled, paused, or resumed.

Definition

Visual Basic	Public Event RecognizerStateChanged As <i>RecognizerStateChangedEventHandler</i>
Basic	Event RecognizerStateChanged As <i>RecognizerStateChangedEventHandler</i>
C#	public event <i>RecognizerStateChangedEventHandler</i> RecognizerStateChanged ;
Managed C++	public: __event RecognizerStateChanged ;
JScript	In JScript, you can use events, but you cannot define your own.

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RejectedRecognition Event

Note: This documentation is preliminary and is subject to change.

Occurs when a spoken phrase is recognized with low confidence.

Definition

Visual Basic	Public Event RejectedRecognition As <i>RecognitionEventHandler</i>
C#	public event <i>RecognitionEventHandler</i> RejectedRecognition ;
Managed C++	public: __event RejectedRecognition ;
JScript	In JScript, you can use events, but you cannot define your own.

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Update Event

Note: This documentation is preliminary and is subject to change.

Occurs when the RequestUpdate and related methods are used to request that the recognition engine pause to allow changes to grammars or other changes to be made.

Definition

Visual Basic	Public Event Update As <i>UpdateEventHandler</i>
---------------------	---

C# public event UpdateEventHandler **Update**;

Managed C++ public: __event **Update**;

JScript In JScript, you can use events, but you cannot define your own.

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UpdateEventArgs Class

Note: This documentation is preliminary and is subject to change.

Provides data for the Update event.

Definition

Visual Basic Public Class **UpdateEventArgs**
 Inherits SpeechEventArgs

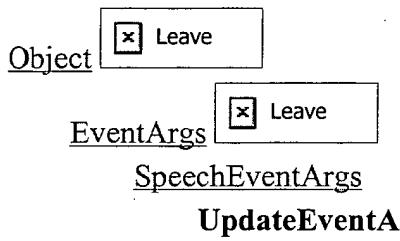
C# public class **UpdateEventArgs** : SpeechEventArgs

Managed C++ public __gc class **UpdateEventArgs** : public SpeechEventArgs

JScript public class **UpdateEventArgs** extends SpeechEventArgs

Members Table

Inheritance Hierarchy



Class Information

Namespace System.Speech.Recognition

Assembly System.Speech (system.speech.dll)

Strong Name System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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UpdateEventArgs Method

Note: This documentation is preliminary and is subject to change.

Initializes a new instance of the UpdateEventArgs class.

Definition

```
Visual Basic  Public Sub UpdateEventArgs( _
                  ByVal audioPosition As TimeSpan, _
                  ByVal tag As Object _
                )
    public UpdateEventArgs(
      TimeSpan audioPosition,
      Object tag
    );
    public: UpdateEventArgs(
      TimeSpan audioPosition,
      Object* tag
    );
    public function UpdateEventArgs(
      audioPosition : TimeSpan,
      tag : Object
    );

```

Managed C++

```
public: UpdateEventArgs(
      TimeSpan audioPosition,
      Object* tag
    );
    public function UpdateEventArgs(
      audioPosition : TimeSpan,
      tag : Object
    );

```

JScript

```
audioPosition : TimeSpan,
tag : Object
```

Parameters

audioPosition **System.TimeSpan**. Placeholder
tag **System.Object**. Application supplied object reference.

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Tag Property

Note: This documentation is preliminary and is subject to change.

Gets an application-supplied object reference.

Definition

```
Visual Basic  Public ReadOnly Property Tag As Object
C#        public Object Tag { get; }
Managed C++ public: __property Object* get_Tag();
JScript    public function get Tag() : Object
```

Property Value

System.Object

This property is read-only.

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IRecognizer Interface

Note: This documentation is preliminary and is subject to change.

Provides an interface representing a speech recognizer.

Definition

Visual Basic Public Interface **IRecognizer**
C# public interface **IRecognizer**
Managed C++ public __gc __interface **IRecognizer**
JScript public interface **IRecognizer**

Members Table

Interface Information

Namespace System.Speech.Recognition
Assembly System.Speech (system.speech.dll)
Strong Name System.Speech, Version=6.0.4044.0, Culture=neutral,
 PublicKeyToken=365143bb27e7ac8b

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AdaptLanguageModel Method

Note: This documentation is preliminary and is subject to change.

Passes a specified string to the recognition engine for use in adapting the active language models.

Overload List

public Void AdaptLanguageModel (String)
public Void AdaptLanguageModel (String[])
public Void AdaptLanguageModel (String, String, AdaptationSettings, AdaptationRelevance)
public Void AdaptLanguageModel (String

`[], String, AdaptationSettings, AdaptationRelevance)`

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EmulateRecognize Method

Note: This documentation is preliminary and is subject to change.

Simulates a speech recognition event by assuming that a specified string was spoken by the user.

Overload List

```
public Void EmulateRecognize (String)  
public Void EmulateRecognize (String, CompareOptions)  
public Void EmulateRecognize (String[])  
public Void EmulateRecognize (String[], CompareOptions)
```

Remarks

Synchronous recognition emulation. The appropriate events are still raise.

Synchronous recognition emulation. The appropriate events are still raise.

Synchronous recognition emulation. The appropriate events are still raise.

Synchronous recognition emulation. The appropriate events are still raise.

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InsertBookmark Method

Note: This documentation is preliminary and is subject to change.

Sets a bookmark at a specified stream position, and fires the Bookmark event.

Definition

```
Visual Basic      Public Sub InsertBookmark(  
                            ByVal streamTimeToDoBookmark As TimeSpan,  
                            ByVal tag As Object  
                        )  
  
public void InsertBookmark(
```

```

C#           TimeSpan streamTimeToDoBookmark,
            object tag
        );
        public: void InsertBookmark(
Managed C++   TimeSpan streamTimeToDoBookmark,
            Object* tag
        );
        public function InsertBookmark(
JScript       streamTimeToDoBookmark : TimeSpan,
            tag : Object
        ) : void;

```

Parameters

streamTimeToDoBookmark **System.TimeSpan**.
tag **System.Object**.

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InsertBookmarkAhead Method

Note: This documentation is preliminary and is subject to change.

Sets a bookmark at a specified amount of time ahead of the current audio position, and fires the Bookmark event.

Definition

```

Visual Basic  Public Sub InsertBookmarkAhead(
                ByVal timeAheadToDoBookmark As TimeSpan,
                ByVal tag As Object
            )
        public void InsertBookmarkAhead(
C#           TimeSpan timeAheadToDoBookmark,
                object tag
            );
        public: void InsertBookmarkAhead(
Managed C++   TimeSpan timeAheadToDoBookmark,
                Object* tag
            );
        public function InsertBookmarkAhead(
JScript       timeAheadToDoBookmark : TimeSpan,
                tag : Object
            ) : void;

```

Parameters

timeAheadToDoBookmark **System.TimeSpan**.
tag **System.Object**.

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RequestUpdate Method

Note: This documentation is preliminary and is subject to change.

Requests an update as soon as the engine can accept it. The system will fire the Update event once the recognizer is ready to receive updates.

Overload List

public Void RequestUpdate ()
public Void RequestUpdate (Object)
public Void RequestUpdate (TimeSpan, Object)

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RequestUpdateAhead Method

Note: This documentation is preliminary and is subject to change.

Requests an update when the engine reaches a position a specified amount of time ahead of the current audio position. If the time ahead is zero, then the engine pauses as soon as it recognizes speech up to the current audio position.

Definition

Visual Basic **Public Sub RequestUpdateAhead(**
 ByVal timeAheadToDoUpdate As TimeSpan,
 ByVal tag As Object
 <>)

C# **public void RequestUpdateAhead(**
 TimeSpan timeAheadToDoUpdate,
 object tag
 <>)

Managed C++ public: **void RequestUpdateAhead(**
 TimeSpan timeAheadToDoUpdate,

```
        Object* tag
    );
    public function RequestUpdateAhead(
        timeAheadToDoUpdate : TimeSpan,
        tag : Object
    ) : void;
```

Parameters

timeAheadToDoUpdate **System.TimeSpan**. ahead of current audio position that the engine will reach before doing the update.

tag **System.Object**. Object that will be passed to the delegate when called. This can be a reference to any object in the application.

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WaitForUpdate Method

Note: This documentation is preliminary and is subject to change.

Raises the Update event, and blocks the recognizer until the Update event handler finishes.

Definition

```
Visual Basic Public Sub WaitForUpdate()
C#     public void WaitForUpdate();
Managed C++ public: void WaitForUpdate();
JScript    public function WaitForUpdate() : void;
```

Remarks

This method will block until the engine is ready to be updated.

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Attributes Property

Note: This documentation is preliminary and is subject to change.

Gets the recognizer attributes of the underlying recognizer. Read only.

Definition

Visual Basic Public ReadOnly Property **Attributes** As RecognizerAttributesC# public RecognizerAttributes Attributes { get; }Managed C++ public: __property RecognizerAttributes* get_Attributes();JScript public function get Attributes() : RecognizerAttributes

Property Value

System.Speech.Recognition.RecognizerAttributes.

This property is read-only.

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AudioContent Property

Note: This documentation is preliminary and is subject to change.

Returns the content of the audio stream.

Definition

Visual Basic Public ReadOnly Property **AudioContent** As AudioContentC# public AudioContent AudioContent { get; }Managed C++ public: __property AudioContent get_AudioContent();JScript public function get AudioContent() : AudioContent

Property Value

System.Speech.Recognition.AudioContent.

This property is read-only.

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EnableRejection Property

Note: This documentation is preliminary and is subject to change.

Gets a value that specifies whether the recognizer splits recognitions into those with high confidence that raise a Recognition event, and those with low confidence that raise a RejectedRecognition event. True by default. If set to false, all recognitions fire a Recognition event.

Definition

Visual Basic Public Property **EnableRejection** As Boolean
C# public bool **EnableRejection** { get; set; }
Managed C++ public: property bool get_EnableRejection();
public: property void set_EnableRejection(bool);
JScript public function **get EnableRejection()** : boolean
public function **set EnableRejection(boolean)**;

Property Value

System.Boolean.

This property is read/write.

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Grammars Property

Note: This documentation is preliminary and is subject to change.

Gets the collection of grammars attached to this recognizer.

Definition

Visual Basic Public ReadOnly Property **Grammars** As GrammarCollection
C# public GrammarCollection **Grammars** { get; }
Managed C++ public: property GrammarCollection* get_Grammars();
JScript public function **get Grammars()** : GrammarCollection

Property Value

System.Speech.Recognition.GrammarCollection.

This property is read-only.

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IsActive Property

Note: This documentation is preliminary and is subject to change.

Gets or sets a value that specifies whether the recognizer is active. Defaults to true.

Definition

Visual Basic Public Property **IsActive** As **Boolean**

C# public **bool** **IsActive** { get; set; }

Managed C++ public: **property bool** **get_IsActive()**;
public: **property void** **set_IsActive(bool)**;

JScript public function **get IsActive()** : **boolean**
public function **set IsActive(boolean)**;

Property Value

System.Boolean.

This property is read/write.

Remarks

For a top level rule to be recognized, it must be active, it must be housed in an active grammar, and that grammar must be housed in a recognizer that is active. If any one of these three conditions are not met, the rule cannot be recognized. Setting this method is used in the shared case to activate and deactivate a set of grammars simultaneously.

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Properties Property

Note: This documentation is preliminary and is subject to change.

Gets the properties of this instance of the recognizer.

Definition

Visual Basic Public ReadOnly Property **Properties** As **RecognizerProperties**

C# public **RecognizerProperties** **Properties** { get; }

Managed C++ public: **property RecognizerProperties*** **get_Properties()**;

JScript public function **get Properties()** : **RecognizerProperties**

Property Value

System.Speech.Recognition.RecognizerProperties.

This property is read-only.

Remarks

Take care when setting the properties when using the Shared Recognizer as these values affect all running Speech applications that are also using the Shared Recognizer.

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State Property

Note: This documentation is preliminary and is subject to change.

Gets the current state of the recognizer.

Definition

```
Visual Basic Public ReadOnly Property State As RecognizerState  
C# public RecognizerState State { get; }  
Managed C++ public: __property RecognizerState get_State();  
JScript public function get State() : RecognizerState
```

Property Value

System.Speech.Recognition.RecognizerState.

This property is read-only.

Remarks

State cannot be set directly. Use the Recognize(), RecognizeAsync(), StopRecognize(), Pause(), or Resume() methods instead.

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AudioContentChanged Event

Note: This documentation is preliminary and is subject to change.

Occurs when the type of signal in the audio input changed.

Definition

```
Visual Basic Public  
Event AudioContentChanged As AudioContentChangedEventHandler
```

C# public event AudioContentChangedEventHandler **AudioContentChanged**;

Managed C++ public: __event **AudioContentChanged**;

JScript In JScript, you can use events, but you cannot define your own.

Remarks

Applications may handle this event to provide user feedback that speech recognition is occurring. This event encompasses the SALT SpeechDetected event and multiple audio state related events from SAPI (StreamStart, SoundStart, PhraseStart, SoundEnd, StreamEnd).

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Bookmark Event

Note: This documentation is preliminary and is subject to change.

Occurs when a bookmark is reached.

Definition

Visual Basic Public Event **Bookmark** As BookmarkEventHandler

C# public event BookmarkEventHandler **Bookmark**;

Managed C++ public: __event **Bookmark**;

JScript In JScript, you can use events, but you cannot define your own.

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Hypothesis Event

Note: This documentation is preliminary and is subject to change.

Occurs when a spoken phrase is partially recognized.

Definition

Visual Basic Public Event **Hypothesis** As RecognitionEventHandler

C# public event RecognitionEventHandler **Hypothesis**;

Managed C++ public: __event **Hypothesis**;

JScript In JScript, you can use events, but you cannot define your own.

Remarks

The application may use this event to display intermediate recognition results to the user.

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InterferenceDetected Event

Note: This documentation is preliminary and is subject to change.

Occurs when the speech recognition engine encounters interference in the input audio stream preventing an optimal speech recognition experience.

Definition

Visual Basic Public Event **InterferenceDetected** As *InterferenceEventHandler*
C# public event *InterferenceEventHandler* **InterferenceDetected**;
Managed C++ public: __event **InterferenceDetected**;
JScript In JScript, you can use events, but you cannot define your own.

Remarks

The application may handle this event to provide feedback to the user to correct the interference. Use the **InterferenceEventArgs** parameter to access the interference type.

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NoRecognition Event

Note: This documentation is preliminary and is subject to change.

Occurs when a spoken phrase is not recognized.

Definition

Visual Basic Public Event **NoRecognition** As *RecognitionEventHandler*
C# public event *RecognitionEventHandler* **NoRecognition**;
Managed C++ public: __event **NoRecognition**;
JScript In JScript, you can use events, but you cannot define your own.

Remarks

Use this event to indicate to the user that the spoken phrase was unrecognized. The Result object in the event args will be null.

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Recognition Event

Note: This documentation is preliminary and is subject to change.

Occurs when a spoken phrase is successfully recognized.

Definition

Visual Basic Public Event **Recognition** As *RecognitionEventHandler*

C# public event *RecognitionEventHandler* **Recognition**;

Managed C++ public: __event **Recognition**;

JScript In JScript, you can use events, but you cannot define your own.

Remarks

Use the **RecognitionEventArgs** parameter to return the audio position and recognition result.

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RecognizeProgressChanged Event

Note: This documentation is preliminary and is subject to change.

Occurs when the input audio volume level changes.

Definition

Visual Basic Public

Basic Event **RecognizeProgressChanged** As *RecognizeProgressChangedEventHandler*

C# public event

RecognizeProgressChangedEventHandler **RecognizeProgressChanged**;

Managed C++ public: __event **RecognizeProgressChanged**;

JScript In JScript, you can use events, but you cannot define your own.

Remarks

This event can be used to dynamically update a VU (volume unit) meter for user feedback without implementing logic to update the VU meter every fixed interval. Use the Recognizer.AudioLevel property to get current audio volume level.

Consider limiting the event so it is raised no more than 10 times per second. Furthermore, no additional RecognizeProgressChanged event is raised until the detect Recognizer.get_AudioLevel event is been processed.

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RecognizerStateChanged Event

Note: This documentation is preliminary and is subject to change.

Occurs when recognition starts, or stops; or when recognition is canceled, paused, or resumed.

Definition

Visual Basic	Public
Basic	Event RecognizerStateChanged As <i>RecognizerStateChangedEventHandler</i>
C#	public event <i>RecognizerStateChangedEventHandler</i> RecognizerStateChanged ;
Managed C++	public: __event RecognizerStateChanged ;
JScript	In JScript, you can use events, but you cannot define your own.

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RejectedRecognition Event

Note: This documentation is preliminary and is subject to change.

Occurs when a spoken phrase is recognized with low confidence.

Definition

Visual Basic	Public Event RejectedRecognition As <i>RecognitionEventHandler</i>
C#	public event <i>RecognitionEventHandler</i> RejectedRecognition ;
Managed C++	public: __event RejectedRecognition ;
JScript	In JScript, you can use events, but you cannot define your own.

Remarks

The application should confirm the recognition result with the user before processing this event as a successful recognition. Use the `RecognitionEventArgs` parameter to return the audio position and recognition result.

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Update Event

Note: This documentation is preliminary and is subject to change.

Occurs when the `RequestUpdate` and related methods are used to request that the recognition engine pause to allow changes to grammars or other changes to be made.

Definition

Visual Basic `Public Event Update As UpdateEventHandler`

C# `public event UpdateEventHandler Update;`

Managed C++ `public: __event Update;`

JScript In JScript, you can use events, but you cannot define your own.

Remarks

The `Update` event is raised to allow the application to make the necessary changes. After the application returns from the event the recognition engine resumes processing. While the event is being raised recognition will not occur, but input audio will continue to be collected and stored by the recognizer in an audio buffer. After the application returns from the event the buffered audio data will be processed ensuring that no real-time audio data is lost and that the user experience is not interrupted.

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AdaptationRelevance Enumeration

Note: This documentation is preliminary and is subject to change.

Specifies an estimate of the language model data relevance.

Definition

Visual Basic `Public Enum AdaptationRelevance`

C# `public enum AdaptationRelevance`

Managed C++ `__value public enum AdaptationRelevance`

JScript `public enum AdaptationRelevance`

Constants

Constant Name	Description
Unknown	The application has no information on relevance. Probably the same as Low relevance, but specified separately.
Low	Language model data relevance is low. Text data might be arbitrary documents, and not be representative of the user or topic.
Medium	Language model data relevance is medium. Text data has additional relevance, documents are previously written by user.
High	Language model data relevance is high. Data is directly selected by the user or application for this topic.

Enumeration Information

Namespace System.Speech.Recognition
Assembly System.Speech (system.speech.dll)
Strong Name System.Speech, Version=6.0.4044.0, Culture=neutral,
 PublicKeyToken=365143bb27e7ac8b

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AdaptationSettings Enumeration

Note: This documentation is preliminary and is subject to change.

Specifies the options to use with the AdaptLanguageModel method to control the language model adaptation process.

Definition

Visual Basic Public Enum **AdaptationSettings**
C# public enum **AdaptationSettings**
Managed C++ __value public enum **AdaptationSettings**
JScript public enum **AdaptationSettings**

Constants

Constant Name	Description
Default	Default engine settings.
AdaptCurrentRecognizer	Perform adaptation for this recognizer object only, and do not store the result of the adaptation after the recognizer is closed.

Persistently store the result of the adaptation in the RecoProfile.

AdaptRecognizerProfile	This flag can be combined with the AdaptCurrentRecognizer flag.
Immediate	Immediately store the result of the adaptation. Sometimes engines will wait until a certain amount of data is obtained before adapting. This makes the adaptation occur immediately.

Enumeration Information

Namespace System.Speech.Recognition
Assembly System.Speech (system.speech.dll)
Strong Name System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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AudioContent Enumeration

Note: This documentation is preliminary and is subject to change.

Specifies the current audio state.

Definition

Visual Basic Public Enum **AudioContent**
C# public enum **AudioContent**
Managed C++ __value public enum **AudioContent**
JScript public enum **AudioContent**

Constants

Constant Name	Description
Stopped	The audio input is stopped.
Silence	The audio input contains silence.
Sound	The audio input contains a non-silence signal, but is not identifiable as speech.
Speech	The audio input contains a speech signal.

Enumeration Information

Namespace System.Speech.Recognition
Assembly System.Speech (system.speech.dll)
Strong System.Speech, Version=6.0.4044.0, Culture=neutral,

Name PublicKeyToken=365143bb27e7ac8b

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Confidence Enumeration

Note: This documentation is preliminary and is subject to change.

Specifies the various high level confidence values possible for speech recognition.

Definition

Visual Basic Public Enum **Confidence**
C# public enum **Confidence**
Managed C++ __value public enum **Confidence**
JScript public enum **Confidence**

Constants

Constant Name	Description
High	Indicates that the speech recognizer has high confidence that the audio was processed correctly. When an application discovers that something has a high level of confidence, it's very likely that the user did in fact say what was recognized.
Normal	Indicates that the speech recognizer has a normal level of confidence that the audio was processed correctly.
Low	Indicates that the speech recognizer has a low level of confidence that the audio was processed correctly. This means that it is likely that the recognition result is not what the user actually said.

Enumeration Information

Namespace System.Speech.Recognition
Assembly System.Speech (system.speech.dll)
Strong Name System.Speech, Version=6.0.4044.0, Culture=neutral,
PublicKeyToken=365143bb27e7ac8b

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InterferenceType Enumeration

Note: This documentation is preliminary and is subject to change.

Specifies the types of interference in the audio input preventing an optimal speech recognition experience.

Definition

Visual Basic	Public Enum InterferenceType
C#	public enum InterferenceType
Managed C++	_value public enum InterferenceType
JScript	public enum InterferenceType

Constants

Constant Name	Description
TooNoisy	The audio input is too noisy for accurate recognition of the input phrase.
NoSignal	The audio input does not contain any audio signal (flat line).
TooLoud	The audio input is too loud for optimal recognition, resulting in clipping of the signal.
TooSoft	The audio input is too soft, resulting in sub-optimal recognition of the input phrase.
TooFast	The audio input is too fast for optimal recognition.
TooSlow	The audio input is too slow for optimal recognition.

Enumeration Information

Namespace	System.Speech.Recognition
Assembly	System.Speech (system.speech.dll)
Strong Name	System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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LeadingSpace Enumeration

Note: This documentation is preliminary and is subject to change.

Specifies how to handle leading space when incorporating RecognitionResult text into surrounding text.

Definition

Visual Basic	Public Enum LeadingSpace
---------------------	---------------------------------

C# public enum **LeadingSpace**
Managed C++ __value public enum **LeadingSpace**
JScript public enum **LeadingSpace**

Constants

Constant Name	Description
ConsumeLeadingSpaces	Indicates that the application will consume spaces before the RecognitionResult that is being incorporated into surrounding text.
NoLeadingSpaces	Indicates that the application will not insert additional space before the RecognitionResult that is being incorporated into surrounding text.
OneLeadingSpace	Indicates that the application will inject a single additional space before the RecognitionResult.
TwoLeadingSpaces	Indicates that the application will inject two additional spaces before the RecognitionResult.

Enumeration Information

Namespace System.Speech.Recognition
Assembly System.Speech (system.speech.dll)
Strong Name System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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RecognizeMode Enumeration

Note: This documentation is preliminary and is subject to change.

Specifies the recognition mode.

Definition

Visual Basic Public Enum **RecognizeMode**
C# public enum **RecognizeMode**
Managed C++ __value public enum **RecognizeMode**
JScript public enum **RecognizeMode**

Constants

Constant Name	Description
---------------	-------------

Automatic	The recognition mode is automatic.
Multiple	The recognition mode is multiple.

Enumeration Information

Namespace System.Speech.Recognition
Assembly System.Speech (system.speech.dll)
Strong Name System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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RecognizerState Enumeration

Note: This documentation is preliminary and is subject to change.

Specifies the current state of the recognizer.

Definition

Visual Basic Public Enum RecognizerState
 C# public enum RecognizerState
Managed C++ __value public enum RecognizerState
JScript public enum RecognizerState

Constants

Constant Name	Description
Stopped	The recognizer is currently stopped, and is not listening.
Paused	The recognizer is currently paused, with input audio continuing to be queued.
Listening	The recognizer is currently listening.
Sleeping	The recognizer is currently asleep. It will wake up if the user says "Wake up"

Enumeration Information

Namespace System.Speech.Recognition
Assembly System.Speech (system.speech.dll)
Strong Name System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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ResultType Enumeration

Note: This documentation is preliminary and is subject to change.

Specifies the types of recognition result that can be sent.

Definition

Visual Basic Public Enum **ResultType**
C# public enum **ResultType**
Managed C++ __value public enum **ResultType**
JScript public enum **ResultType**

Constants

Constant Name	Description
Hypothesis	A trecoignition result which is a hypothesis, or a provisional match of part of the input speech.
Recognition	A recognition result that the engine recommends can be acted on.
RejectedRecognition	A recognition result that has low confidence and thus the engine does not recommend acting on without confirmation from the user.
NoRecognition	The recognizer finished processing the speech but was unable to recognize anything.
RecognitionForOtherRecognizer	The engine recognized speech for a different application, and the full result was sent there.
RecognitionTimeout	Recognition terminated due to initial silence or babble timeout.

Examples

The following code example displays the recognition result and updates the semantics and alternates.

```
private void Recognizer_Recognition(object sender, RecognitionEventArgs e
Private Sub ProcessRecognition(ByVal e As RecognitionEventArgs)      ' D
```

Enumeration Information

Namespace System.Speech.Recognition

Assembly System.Speech (system.speech.dll)
Strong Name System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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TrailingSpace Enumeration

Note: This documentation is preliminary and is subject to change.

Specifies how to handle trailing space when incorporating the RecognitionResult's text into surrounding text.

Definition

Visual Basic Public Enum **TrailingSpace**
 C# public enum **TrailingSpace**
Managed C++ **_value** public enum **TrailingSpace**
JScript public enum **TrailingSpace**

Constants

Constant Name	Description
ConsumeTrailingSpaces	Indicates that the application will consume spaces after the RecognitionResult that is being incorporated into surrounding text.
NoTrailingSpaces	Indicates that the application will not inject any additional spaces after the RecognitionResult that is being incorporated into surrounding text.
OneTrailingSpace	Indicates that the application will inject a single additional space after the RecognitionResult that is being incorporated into surrounding text.
TwoTrailingSpaces	Indicates that the application will inject two additional spaces after the RecognitionResult that is being incorporated into surrounding text.

Enumeration Information

Namespace System.Speech.Recognition
Assembly System.Speech (system.speech.dll)
Strong Name System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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DictationTopic Structure

Note: This documentation is preliminary and is subject to change.

Represents a dictation topic.

Definition

Visual Basic Public Structure DictationTopic

C# public struct DictationTopic

Managed C++ public __value struct DictationTopic

JScript In JScript, you can use structures, but you cannot define your own.

Members Table

Remarks

Standard topics (general, spelling) are predefined, others can be created.

Structure Information

Namespace System.Speech.Recognition

Assembly System.Speech (system.speech.dll)

Strong System.Speech, Version=6.0.4044.0, Culture=neutral,

Name PublicKeyToken=365143bb27e7ac8b

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DictationTopic Method

Note: This documentation is preliminary and is subject to change.

Create a new dictation topic from a topic name.

Definition

Visual Basic Public Sub **DictationTopic**(_

ByVal *topicName* As String _

)

C# public **DictationTopic**(
 string *topicName*

```
 );
public: DictationTopic(
Managed C++  String* topicName
);
public function DictationTopic(
JScript      topicName : String
);
```

Parameters

topicName **System.String**.

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Equals Method

Note: This documentation is preliminary and is subject to change.

Gets a value indicating whether the tag formats represent the same string.

Overload List

public override Boolean Equals (Object)
public override Boolean Equals (DictationTopic)

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GetHashCode Method

Note: This documentation is preliminary and is subject to change.

Gets the hash code of the tag format string.

Definition

Visual Basic Overrides Public Function **GetHashCode()** As Integer
C# public override int **GetHashCode()**;
Managed C++ public: int **GetHashCode()**;
JScript public override function **GetHashCode()** : int;

Return Value

System.Int32.

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Tostring Method

Note: This documentation is preliminary and is subject to change.

Gets a string representation of the topic name.

Definition

Visual Basic Overrides Public Function **ToString()** As **String**

C# public override **string** **ToString()**;

Managed C++ public: **String*** **ToString()**;

JScript public override function **ToString()** : **String**;

Return Value

System.String.

String representation

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General Property

Note: This documentation is preliminary and is subject to change.

Gets a general dictation topic.

Definition

Visual Basic Public Shared ReadOnly Property **General** As **DictationTopic**

C# public static **DictationTopic** **General** { get; }

Managed C++ public: __property static **DictationTopic** get__General();

JScript public static function get **General()** : **DictationTopic**

Property Value

System.Speech.Recognition.DictationTopic.

This property is read-only.

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Spelling Property

Note: This documentation is preliminary and is subject to change.

Gets a spelling topic.

Definition

Visual Basic Public Shared ReadOnly Property **Spelling** As **DictationTopic**
C# public static **DictationTopic** **Spelling** { get; }
Managed C++ public: __property static **DictationTopic** get_**Spelling**();
JScript public static function get **Spelling**() : **DictationTopic**

Property Value

System.Speech.Recognition.DictationTopic.

This property is read-only.

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ActiveCategoryChangedEventHandler Delegate

Note: This documentation is preliminary and is subject to change.

Represents the method that will handle the ActiveCategoryChangedEventHandler event.

Definition

Visual Basic Public Delegate Sub **ActiveCategoryChangedEventHandler**(
 ByVal *sender* As **Object**,
 ByVal *e* As **ActiveCategoryChangedEventArgs**
);
C# public delegate **void** **ActiveCategoryChangedEventHandler**(
 object *sender*,
 ActiveCategoryChangedEventArgs *e*
);
public: __gc __delegate **void** **ActiveCategoryChangedEventHandler**(
 Object* *sender*,

Managed C++ `ActiveCategoryChangedEventArgs* e`
`);`

JScript In JScript, you can use delegates, but you cannot define your own.

Parameters

sender `System.Object`.

e `System.Speech.Recognition.ActiveCategoryChangedEventArgs`.

Delegate Information

Namespace `System.Speech.Recognition`

Assembly `System.Speech (system.speech.dll)`

Strong Name `System.Speech, Version=6.0.4044.0, Culture=neutral,`

`PublicKeyToken=365143bb27e7ac8b`

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AudioContentChangedEventHandler Delegate

Note: This documentation is preliminary and is subject to change.

Represents the method that will handle the `AudioContentChanged` event.

Definition

Visual Basic `Public Delegate Sub AudioContentChangedEventHandler(`
`ByVal sender As Object,`
`ByVal e As AudioContentChangedEventArgs`
`);`

C# `public delegate void AudioContentChangedEventHandler(`
`object sender,`
`AudioContentChangedEventArgs e`
`);`

Managed C++ `public: __gc __delegate void AudioContentChangedEventHandler(`
`Object* sender,`
`AudioContentChangedEventArgs* e`
`);`

JScript In JScript, you can use delegates, but you cannot define your own.

Parameters

sender `System.Object`.

e `System.Speech.Recognition.AudioContentChangedEventArgs`.

Delegate Information

Namespace System.Speech.Recognition
Assembly System.Speech (system.speech.dll)
Strong Name System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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BookmarkEventHandler Delegate

Note: This documentation is preliminary and is subject to change.

Represents the method that will handle the Bookmark event.

Definition

```
Public Delegate Sub BookmarkEventHandler( _
  ByVal sender As Object, _
  ByVal e As BookmarkEventArgs _
)
public delegate void BookmarkEventHandler(
  object sender,
  BookmarkEventArgs e
);
public: __gc __delegate void BookmarkEventHandler(
  Object* sender,
  BookmarkEventArgs* e
);
JScript In JScript, you can use delegates, but you cannot define your own.
```

Parameters

sender System.Object.
e System.Speech.Recognition.BookmarkEventArgs.

Delegate Information

Namespace System.Speech.Recognition
Assembly System.Speech (system.speech.dll)
Strong Name System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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CommandRecognitionEventHandler Delegate

Note: This documentation is preliminary and is subject to change.

Represents the method that will handle the CommandRecognition event in Command and CommandSet.

Definition

```
Visual Basic  Public Delegate Sub CommandRecognitionEventHandler( _
                  ByVal sender As Object, _
                  ByVal e As CommandRecognitionEventArgs) _
)
public delegate void CommandRecognitionEventHandler(
                  object sender,
                  CommandRecognitionEventArgs e
);
public: __gc __delegate void CommandRecognitionEventHandler(
                  Object* sender,
                  CommandRecognitionEventArgs* e
);
JScript    In JScript, you can use delegates, but you cannot define your own.
```

Parameters

sender **System.Object**.
e **System.Speech.Recognition.CommandRecognitionEventArgs**.

Delegate Information

Namespace **System.Speech.Recognition**
Assembly **System.Speech (system.speech.dll)**
Strong Name **System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b**

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InterferenceEventHandler Delegate

Note: This documentation is preliminary and is subject to change.

Represents the method that will handle the InterferenceDetected event.

Definition

```

Visual Basic   Public Delegate Sub InterferenceEventHandler(_
                  ByVal sender As Object,_
                  ByVal e As InterferenceEventArgs_
)
C#           public delegate void InterferenceEventHandler(_
                  object sender,_
                  InterferenceEventArgs e
);
Managed C++ public: __gc __delegate void InterferenceEventHandler(_
                  Object* sender,_
                  InterferenceEventArgs* e
);
JScript      In JScript, you can use delegates, but you cannot define your own.

```

Parameters

sender **System.Object**.
e **System.Speech.Recognition.InterferenceEventArgs**.

Delegate Information

Namespace **System.Speech.Recognition**
Assembly **System.Speech (system.speech.dll)**
Strong Name **System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b**

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RecognitionEventHandler Delegate

Note: This documentation is preliminary and is subject to change.

Represents the method that will handle the following events: **Recognition**, **RejectedRecognition**, and **Hypothesis**.

Definition

```

Visual Basic   Public Delegate Sub RecognitionEventHandler(_
                  ByVal sender As Object,_
                  ByVal e As RecognitionEventArgs_
)
C#           public delegate void RecognitionEventHandler(_
                  object sender,

```

C# RecognitionEventArgs *e*
);
 public: __gc __delegate void RecognitionEventHandler(
 Managed C++ Object* *sender*,
 RecognitionEventArgs* *e*
);
 JScript In JScript, you can use delegates, but you cannot define your own.

Parameters

sender System.Object.
e System.Speech.RecognitionEventArgs.

Delegate Information

Namespace System.Speech.Recognition
Assembly System.Speech (system.speech.dll)
Strong Name System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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RecognizeCompletedEventHandler Delegate

Note: This documentation is preliminary and is subject to change.

Represents the method that will handle the RecognizeCompleted event.

Definition

Visual Basic Public Delegate Sub RecognizeCompletedEventHandler(
 ByVal *sender* As Object,
 ByVal *e* As RecognizeCompletedEventArgs
)
 C# public delegate void RecognizeCompletedEventHandler(
 object *sender*,
 RecognizeCompletedEventArgs *e*
);
 public: __gc __delegate void RecognizeCompletedEventHandler(
 Managed C++ Object* *sender*,
 RecognizeCompletedEventArgs* *e*
);
 JScript In JScript, you can use delegates, but you cannot define your own.

Parameters

sender **System.Object**.
e **System.Speech.Recognition.RecognizeCompletedEventArgs**.

Delegate Information

Namespace **System.Speech.Recognition**
Assembly **System.Speech (system.speech.dll)**
Strong Name **System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b**

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RecognizeProgressChangedEventHandler Delegate

Note: This documentation is preliminary and is subject to change.

Represents the method that will handle the **RecognizeProgressChanged** event.

Definition

Visual Basic **Public Delegate Sub RecognizeProgressChangedEventHandler(**
 ByVal sender As Object,
 ByVal e As RecognizeProgressChangedEventArgs
 <>)

C# **public delegate void RecognizeProgressChangedEventHandler(**
 object sender,
 RecognizeProgressChangedEventArgs e
 <);

Managed C++ **public: __gc __delegate void RecognizeProgressChangedEventHandler(**
 Object sender*,
 RecognizeProgressChangedEventArgs e*
 <);

JScript In JScript, you can use delegates, but you cannot define your own.

Parameters

sender **System.Object**.
e **System.Speech.Recognition.RecognizeProgressChangedEventArgs**.

Delegate Information

Namespace	System.Speech.Recognition
Assembly	System.Speech (system.speech.dll)
Strong Name	System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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RecognizerStateChangedEventHandler Delegate

Note: This documentation is preliminary and is subject to change.

Represents the method that will handle the RecognizerStateChanged event.

Definition

Visual Basic	<pre>Public Delegate Sub RecognizerStateChangedEventHandler(_ ByVal sender As Object, _ ByVal e As RecognizerStateChangedEventArgs) </pre>
C#	<pre>public delegate void RecognizerStateChangedEventHandler(object sender, RecognizerStateChangedEventArgs e); </pre>
Managed C++	<pre>public: __gc __delegate void RecognizerStateChangedEventHandler(Object* sender, RecognizerStateChangedEventArgs* e); </pre>
JScript	<p>In JScript, you can use delegates, but you cannot define your own.</p>

Parameters

sender System.Object.
e System.Speech.Recognition.RecognizerStateChangedEventArgs.

Delegate Information

Namespace	System.Speech.Recognition
Assembly	System.Speech (system.speech.dll)
Strong Name	System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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SpeechEventHandler Delegate

Note: This documentation is preliminary and is subject to change.

Represents the method that will handle the following events: NoRecognition, AudioLevelChanged, RecognitionStarted, RecognitionStopped, RecognitionCanceled, RecognitionPaused, and RecognitionResumed.

Definition

```
Public Delegate Sub SpeechEventHandler(  
    ByVal sender As Object,  
    ByVal e As SpeechEventArgs  
)  
public delegate void SpeechEventHandler(  
    object sender,  
    SpeechEventArgs e  
);  
public: __gc __delegate void SpeechEventHandler(  
    Object* sender,  
    SpeechEventArgs* e  
);  
JScript In JScript, you can use delegates, but you cannot define your own.
```

Parameters

sender **System.Object**.
e **System.Speech.Recognition.SpeechEventArgs**.

Delegate Information

Namespace **System.Speech.Recognition**
Assembly **System.Speech (system.speech.dll)**
Strong Name **System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b**

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UpdateEventHandler Delegate

Note: This documentation is preliminary and is subject to change.

Represents the methods that handle the Updated event and related events.

Definition

```

Visual Basic  Public Delegate Sub UpdateEventHandler(_
    ByVal sender As Object,_
    ByVal e As UpdateEventArgs_
)
C#      public delegate void UpdateEventHandler(_
    object sender,_
    UpdateEventArgs e
);
Managed C++ public: __gc __delegate void UpdateEventHandler(_
    Object* sender,_
    UpdateEventArgs* e
);
JScript   In JScript, you can use delegates, but you cannot define your own.

```

Parameters

sender **System.Object**.
e **System.Speech.Recognition.UpdateEventArgs**.

Delegate Information

Namespace **System.Speech.Recognition**
Assembly **System.Speech (system.speech.dll)**
Strong Name **System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b**

Remarks

The RequestUpdate and related methods are used to request that the recognition engine pause to allow changes to grammars or other changes to be made. When the engine responds to the request, the Update event is called to allow the application to make the necessary changes. After the application returns from the event the recognition engine resumes processing. While the event is being called, recognition will not be occurring, but input audio will continue to be collected and stored by the Recognizer in an audio buffer. After the application returns from the event the buffered audio data will be processed ensuring that no real-time audio data is lost and that the user experience is not interrupted.

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System.Speech.Srgs

Note: This documentation is preliminary and is subject to change.

The following tables list the members exposed by the System.Speech.Srgs namespace.

Classes

<u>Example</u>	Represents the World Wide Web Consortium (W3C) Speech Recognition Grammar Specification (SRGS) example element. See http://www.w3.org/TR/speech-grammar/ for more information.
<u>Item</u>	Represents the World Wide Web Consortium (W3C) Speech Recognition Grammar Specification (SRGS) item element. See http://www.w3.org/TR/speech-grammar/ for more information.
<u>ItemElementCollection</u>	Represents the collection of objects that can be children of an Item class instance.
<u>OneOf</u>	Represents the World Wide Web Consortium (W3C) Speech Recognition Grammar Specification (SRGS) one-of element. See http://www.w3.org/TR/speech-grammar/ for more information.
<u>OneOfElementCollection</u>	Represents a collection of objects that can be child elements of an OneOf class instance.
<u>PropertyTag</u>	Represents the World Wide Web Consortium (W3C) Speech Recognition Grammar Specification (SRGS) tag element with SAPI Properties. See http://www.w3.org/TR/speech-grammar/ for more information.
<u>Rule</u>	Represents the World Wide Web Consortium (W3C) Speech Recognition Grammar Specification (SRGS) rule element. See http://www.w3c.org/TR/speech-grammar/ for more information.
<u>RuleCollection</u>	Represents a collection of objects that can be child elements of a Rule class instance.
<u>RuleElementCollection</u>	Represents a collection of objects that are valid within a Rule class instance.
<u>RuleRef</u>	Example represents the World Wide Web Consortium (W3C) Speech Recognition Grammar Specification (SRGS) ruleref element. See http://www.w3.org/TR/speech-grammar/ for more information.
<u>SpecialRuleRef</u>	SpecialRuleRef class instance allow grammars based on context-free grammars (CFG) to have powerful additional features, such as transitions into dictation (both recognized or not recognized) and word sequences from SAPI 5.0.
<u>SrgsGrammar</u>	Represents the logical housing for individual rules and dictation grammars.
<u>SrgsText</u>	Represents text content in Speech Recognition Grammar Specification (SRGS) markup.
<u>Tag</u>	Represents the World Wide Web Consortium (W3C) Speech Recognition Grammar Specification (SRGS) tag element. See http://www.w3.org/TR/speech-grammar/ for more information.
<u>Token</u>	Token represents the World Wide Web Consortium (W3C) Speech Recognition Grammar Specification (SRGS) token element. See http://www.w3.org/TR/speech-grammar/ for more

information.

Interfaces

[IItemElement](#) The IItemElement interface is an empty interface implemented by all Speech Recognition Grammar Specification (SRGS) elements that can be a child element of the item element. (Item, OneOf, RuleRef, SpecialRuleRef, Tag, Token, SrgsText)

[IRuleElement](#) The IRuleElement interface is an empty interface implemented by all Speech Recognition Grammar Specification (SRGS) elements that can be a child element of the Rule element. (Example, Item, OneOf, RuleRef, SpecialRuleRef, Tag, Token, SrgsText)

Enumerations

[GrammarMode](#) Identifies the grammar mode as either Voice or dual tone, multi-frequency (DTMF).

[RuleScope](#) RuleScope specifies how a rule behaves. The behavior includes whether or not it can be referenced by other rules and whether or not the rule can be activated.

[SpecialRuleRefType](#) Special rule references allow grammars based on context-free grammars (CFG) to have powerful additional features, such as transitions into dictation (both recognized or not recognized) and word sequences from SAPI 5.0.

Structures

[TagFormat](#) TagFormat extensible enumeration.

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Example Class

Note: This documentation is preliminary and is subject to change.

Represents the World Wide Web Consortium (W3C) Speech Recognition Grammar Specification (SRGS) example element. See <http://www.w3.org/TR/speech-grammar/> for more information.

Definition

Public Class **Example**
Visual Basic Inherits [Object](#)
 Implements [IRuleElement](#)

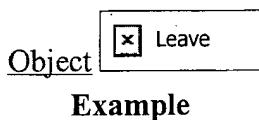
```

C#     public class Example : Object,
           IRuleElement
Managed C++ public __gc class Example : public Object,
           IRuleElement
JScript  public class Example extends Object
           implements IRuleElement

```

Members Table

Inheritance Hierarchy



Class Information

Namespace System.Speech.Srgs
Assembly System.Speech (system.speech.dll)
Strong Name System.Speech, Version=6.0.4044.0, Culture=neutral,
Name PublicKeyToken=365143bb27e7ac8b

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Example Method

Note: This documentation is preliminary and is subject to change.

Initializes a new instance of the Example class.

Overload List

```

public Example()
public Example(String)

```

Remarks

The Example property must be set prior to committing the associated rule(s) to the Grammar object.

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ToString Method

Note: This documentation is preliminary and is subject to change.

Definition

Visual Basic Overrides Public Function **ToString()** As **String**

C# public override **string ToString()**;

Managed C++ public: **String* ToString()**;

JScript public override function **ToString()** : **String**;

Return Value

System.String.

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Text Property

Note: This documentation is preliminary and is subject to change.

Gets and sets Example class text.

Definition

Visual Basic Public Property **Text** As **String**

C# public **string Text** { get; set; }

Managed C++ public: **property String* get_Text()**;

public: **property void set_Text(String*)**;

JScript public function **get Text()** : **String**
public function **set Text(String)**;

Property Value

System.String.

This property is read/write.

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Item Class

Note: This documentation is preliminary and is subject to change.

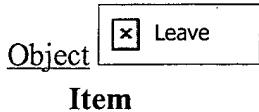
Represents the World Wide Web Consortium (W3C) Speech Recognition Grammar Specification (SRGS) item element. See <http://www.w3.org/TR/speech-grammar/> for more information.

Definition

Public Class Item
Visual Basic Inherits Object
 Implements IItemElement, IRuleElement
C# public class **Item** : Object,
 IItemElement, IRuleElement
Managed C++ public __gc class **Item** : public Object,
 IItemElement, IRuleElement
JScript public class **Item** extends Object
 implements IRuleElement, IItemElement

Members Table

Inheritance Hierarchy



Class Information

Namespace System.Speech.Srgs
Assembly System.Speech (system.speech.dll)
Strong Name System.Speech, Version=6.0.4044.0, Culture=neutral,
 PublicKeyToken=365143bb27e7ac8b

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Item Method

Note: This documentation is preliminary and is subject to change.

Initializes a new instance of the Item class.

Overload List

```

public Item()
public Item(String)
public Item(String, Tag)
public Item(String, PropertyTag)

```

```
public Item (String, Tag, Single)  
public Item (Int32, Int32)  
public Item (Int32, Int32, Single)  
public Item (IItemElement)
```

Remarks

The weight of an Item is the probability that the user will speak the phrase contained in the Item, as opposed to another phrase contained in a sibling Item.

The minRepeat parameter describes the number of occurrences the user must speak the phrase contained in this Item class instance for the recognition to be successful.

The maxRepeat parameter describes the number of occurrences the user can speak the phrase contained in this Item class instance and still have a successful recognition.

The minRepeat parameter describes the number of occurrences the user must speak the phrase contained in this Item class instance for the recognition to be successful.

The maxRepeat parameter describes the number of occurrences the user can speak the phrase contained in this Item class instance and still have a successful recognition.

The repeatProbability parameter describes the probability that the phrase contained in this Item class instance will be repeated one or more times.

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SetRepeat Method

Note: This documentation is preliminary and is subject to change.

Sets the repeat count for the Item class instance.

Overload List

```
public Void SetRepeat (Int32)  
public Void SetRepeat (Int32, Int32)
```

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Elements Property

Note: This documentation is preliminary and is subject to change.

Gets the zero-based collection of all the child elements of the Item class instance. Read only.

Definition

Visual Basic Public ReadOnly Property **Elements** As ItemElementCollection

C# public ItemElementCollection **Elements** { get; }

Managed C++ public: __property ItemElementCollection* get_Elements();

JScript public function get **Elements()** : ItemElementCollection

Property Value

System.Speech.Srgs.ItemElementCollection.

This property is read-only.

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MaxRepeat Property

Note: This documentation is preliminary and is subject to change.

Gets the maximum number of occurrences this Item class instance can be repeated for a successful recognition. Read-only.

Definition

Visual Basic Public ReadOnly Property **MaxRepeat** As Integer

C# public int **MaxRepeat** { get; }

Managed C++ public: __property int get_MaxRepeat();

JScript public function get **MaxRepeat()** : int

Property Value

System.Int32.

This property is read-only.

Remarks

This property represents a portion of the repeat attribute of the World Wide Web Consortium (W3C) Speech Recognition Grammar Specification (SRGS) item element.

See Also

- [MaxRepeat](#)

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MinRepeat Property

Note: This documentation is preliminary and is subject to change.

Gets the minimum number of occurrences this Item class instance must be repeated for a successful recognition. Read-only.

Definition

Visual Basic Public ReadOnly Property **MinRepeat** As **Integer**

C# public **int** **MinRepeat** { **get**; }

Managed C++ public: **property int** **get_MinRepeat()**;

JScript public function **get MinRepeat()** : **int**

Property Value

System.Int32.

This property is read-only.

Remarks

This property represents a portion of the repeat attribute of the World Wide Web Consortium (W3C) Speech Recognition Grammar Specification (SRGS) item element.

See Also

- [MaxRepeat](#)

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RepeatProbability Property

Note: This documentation is preliminary and is subject to change.

Gets and sets a value representing the probability that the phrase contained in an Item class instance will be repeated.

Definition

Visual Basic Public Property **RepeatProbability** As **Single**

```
C#     public float RepeatProbability { get; set; }  
Managed C++ public: __property float get_RepeatProbability();  
public: __property void set_RepeatProbability(float);  
JScript     public function get RepeatProbability() : float  
            public function set RepeatProbability(float);
```

Property Value

System.Single.

This property is read/write.

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Weight Property

Note: This documentation is preliminary and is subject to change.

Gets and sets the likelihood that the phrase contained in an Item class instance will be uttered when contained within a OneOf class instance.

Definition

Visual Basic Public Property **Weight** As Single

```
C#     public float Weight { get; set; }  
Managed C++ public: __property float get_Weight();  
public: __property void set_Weight(float);  
JScript     public function get Weight() : float  
            public function set Weight(float);
```

Property Value

System.Single.

This property is read/write.

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ItemElementCollection Class

Note: This documentation is preliminary and is subject to change.

Represents the collection of objects that can be children of an Item class instance.

Definition

Visual Basic Public Class **ItemElementCollection**
 Inherits CollectionBase

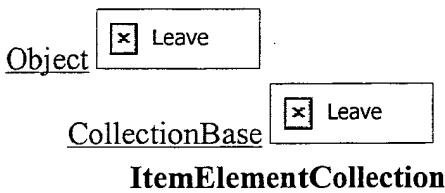
C# public class **ItemElementCollection** : CollectionBase

Managed C++ public __gc class **ItemElementCollection** : public CollectionBase

JScript public class **ItemElementCollection** extends CollectionBase

Members Table

Inheritance Hierarchy



Class Information

Namespace System.Speech.Srgs

Assembly System.Speech (system.speech.dll)

Strong Name System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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Add Method

Note: This documentation is preliminary and is subject to change.

Adds a new Item class instance to the RuleElementCollection.

Overload List

[public Int32 Add \(Item\)](#)
[public Int32 Add \(OneOf\)](#)
[public Int32 Add \(RuleRef\)](#)
[public Int32 Add \(SpecialRuleRef\)](#)
[public Int32 Add \(Tag\)](#)
[public Int32 Add \(Token\)](#)
[public Int32 Add \(SrgsText\)](#)
[public Int32 Add \(String\)](#)

public Int32 Add (IItemElement)

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AddItem Method

Note: This documentation is preliminary and is subject to change.

Adds a new Item class instance to the ItemElementCollection.

Overload List

public Void AddItem (Item)
public Item AddItem ()
public Item AddItem (String)
public Item AddItem (String, String)
public Item AddItem (String, String, Object)

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AddItems Method

Note: This documentation is preliminary and is subject to change.

Adds multiple Item class instances to the ItemElementCollection.

Overload List

public Item AddItems (String, String)
public Item AddItems (String, String, String)
public Item AddItems (String[])

Remarks

This is essentially a macro for calling AddItem twice.

This is essentially a macro for calling AddItem three times

This is essentially a macro for calling AddItem multiple times.

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AddOneOf Method

Note: This documentation is preliminary and is subject to change.

Adds a OneOf class instance to the ItemElementCollection.

Overload List

```
public Void AddOneOf(OneOf)
public OneOf AddOneOf()
public OneOf AddOneOf(String, String)
public OneOf AddOneOf(String, String, String)
public OneOf AddOneOf(String[])
public OneOf AddOneOf(Item[])
```

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AddOptionalItem Method

Note: This documentation is preliminary and is subject to change.

Adds a new optional Item class instance to the ItemElementCollection.

Overload List

```
public Item AddOptionalItem()
public Item AddOptionalItem(String)
```

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AddRepeatingItem Method

Note: This documentation is preliminary and is subject to change.

Adds a new Item class instance to the ItemElementCollection. This instance contains the minimum and maximum number of repetitions required for successful recognition.

Definition

Public Function **AddRepeatingItem(**

```

Visual Basic    ByVal minRepeat As Integer, _
                  ByVal maxRepeat As Integer _
                  ) As Item
                  public Item AddRepeatingItem(
C#                  int minRepeat,
                  int maxRepeat
                  );
                  public: Item* AddRepeatingItem(
Managed C++    int minRepeat,
                  int maxRepeat
                  );
                  public function AddRepeatingItem(
JScript                  minRepeat : int,
                  maxRepeat : int
                  ) : Item;

```

Parameters

minRepeat **System.Int32**. Minimum number of occurrences of the new Item class instance.

maxRepeat **System.Int32**. Maximum number of occurrences of the new Item class instance.

Return Value

System.Speech.Srgs.Item.

Returns the newly added Item class instance.

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AddRuleRef Method

Note: This documentation is preliminary and is subject to change.

Adds a new RuleRef class instance to the ItemElementCollection.

Overload List

```

public Void AddRuleRef (RuleRef)
public RuleRef AddRuleRef (String)
public RuleRef AddRuleRef (Rule)

```

Remarks

This method can also be used to refer to dictation grammars. The general dictation model is referenced by: AddRuleRef("recognitiontopic:general"); and a specific topic. For example: AddRuleRef("recognitiontopic:spelling");

If the rule is part of the same grammar, the rule reference will be a local reference.

If the rule is part of another grammar, the rule reference will automatically be determined based on the grammar that the rule comes from.

For example, if the rule is part of a grammar that was loaded with a call to Grammar.Load, the URI specified in that call is used and the Rule.Id is used for the local part. For example the URI appears in the form: "{0}#{1}", where 0=URI from Grammar.Load, and 1=Rule.Id.

Another example is if the rule is part of a grammar that's been built dynamically, the rule is automatically added (at Commit time) to the Grammar that this rule reference is a part of, if it doesn't already appear there.

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AddSpecialRuleRef Method

Note: This documentation is preliminary and is subject to change.

Adds a new SpecialRuleRef class instance to the ItemElementCollection.

Definition

```
Public Sub AddSpecialRuleRef(  
    Visual Basic    ByVal specialRuleRef As SpecialRuleRef  
    )  
    public void AddSpecialRuleRef(  
        C#           SpecialRuleRef specialRuleRef  
        );  
        public: void AddSpecialRuleRef(  
    Managed C++    SpecialRuleRef* specialRuleRef  
        );  
        public function AddSpecialRuleRef(  
            JScript      specialRuleRef: SpecialRuleRef  
            ) : void;
```

Parameters

specialRuleRef System.Speech.Srgs.SpecialRuleRef. The SpecialRuleRef class instance being added.

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AddTag Method

Note: This documentation is preliminary and is subject to change.

Adds a Tag class instance to the ItemElementCollection.

Overload List

```
public Void AddTag (Tag)  
public Tag AddTag (String)
```

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AddToken Method

Note: This documentation is preliminary and is subject to change.

Adds a new Token class instance to the ItemElementCollection.

Overload List

```
public Void AddToken (Token)  
public Token AddToken (String)  
public Token AddToken (String, String)
```

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Contains Method

Note: This documentation is preliminary and is subject to change.

Determines whether the ItemElementCollection contains the specified IItemElement.

Definition

```
Visual Basic      Public Function Contains(  
                           ByVal element As IItemElement  
                          ) As Boolean
```

```

C#     public bool Contains(
            IItemElement element
        );
        public: bool Contains(
    Managed C++  IItemElement* element
        );
        public function Contains(
    JScript      element : IItemElement
        ) : boolean;

```

Parameters

element **System.Speech.Srgs.IItemElement**. The IItemElement to locate in the ItemElementCollection.

Return Value

System.Boolean.

Returns true if the ItemElementCollection contains the specified IItemElement; otherwise, false is returned.

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IndexOf Method

Note: This documentation is preliminary and is subject to change.

Searches the ItemElement Collection for the specified IItemElement.

Definition

```

Public Function IndexOf(
    Visual Basic  ByVal element As IItemElement
                    ) As Integer
    public int IndexOf(
        C#           IItemElement element
    );
    public: int IndexOf(
    Managed C++  IItemElement* element
    );
    public function IndexOf(
    JScript      element : IItemElement
    ) : int;

```

Parameters

element **System.Speech.Srgs.IItemElement**. The IItemElement being located within the ItemElementCollection.

Return Value

System.Int32.

Returns the zero-based index of the first occurrence of the IItemElement within the ItemElementCollection, if found; otherwise, -1 is returned.

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Insert Method

Note: This documentation is preliminary and is subject to change.

Inserts a new IItemElement into the ItemElementCollection at the specified index location.

Definition

```
Public Sub Insert(  
    ByVal index As Integer,  
    ByVal element As IItemElement  
)  
    public void Insert(  
        int index,  
        IItemElement element  
    );  
    public: void Insert(  
        int index,  
        IItemElement* element  
    );  
    public function Insert(  
        index : int,  
        element : IItemElement  
    ) : void;
```

Parameters

index **System.Int32**. The zero-based index where the IItemElement is to be inserted.

element **System.Speech.Srgs.IItemElement**. The IItemElement to insert.

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ItemElementCollection Method

Note: This documentation is preliminary and is subject to change.

Initializes a new instance of the ItemElementCollection class and specifies the owning Item class instance.

Definition

```
Visual Basic  Public Sub ItemElementCollection( _
                  ByVal owner As Item _
                )
C#           public ItemElementCollection(
                  Item owner
                );
Managed C++  public: ItemElementCollection(
                  Item* owner
                );
JScript      public function ItemElementCollection(
                  owner : Item
                );
```

Parameters

owner **System.Speech.Srgs.Item**. Item class instance.

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OnClear Method

Note: This documentation is preliminary and is subject to change.

Definition

```
Visual Basic Overrides Protected Sub OnClear()
C#           protected override void OnClear();
Managed C++ protected: void OnClear();
JScript      protected override function OnClear() : void;
```

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OnInsert Method

Note: This documentation is preliminary and is subject to change.

Definition

Overrides Protected Sub **OnInsert**(
 `Visual Basic` `ByVal index As Integer,`
 `ByVal value As Object`
 `)`
 `C#` `int index,`
 `object value`
 `);`
 `protected override void OnInsert(`
 `int index,`
 `Object* value`
 `);`
 `protected override function OnInsert(`
 `index : int,`
 `value : Object`
 `) : void;`

Parameters

`index System.Int32.`
`value System.Object.`

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OnRemove Method

Note: This documentation is preliminary and is subject to change.

Definition

Overrides Protected Sub **OnRemove**(
 `Visual Basic` `ByVal index As Integer,`
 `ByVal value As Object`
 `)`
 `C#` `int index,`
 `object value`
 `);`

```

protected: void OnRemove(
Managed C++   int index,
                  Object* value
                );
protected override function OnRemove(
JScript      index : int,
                  value : Object
                ) : void;

```

Parameters

index **System.Int32**.
value **System.Object**.

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OnSet Method

Note: This documentation is preliminary and is subject to change.

Definition

```

Overrides Protected Sub OnSet(
  ByVal index As Integer,
Visual Basic  ByVal oldValue As Object,
                  ByVal newValue As Object
                )
protected override void OnSet(
  C#          int index,
                  object oldValue,
                  object newValue
                );
protected: void OnSet(
  Managed C++ int index,
                  Object* oldValue,
                  Object* newValue
                );
protected override function OnSet(
  JScript      index : int,
                  oldValue : Object,
                  newValue : Object
                ) : void;

```

Parameters

```
index System.Int32.  
oldValue System.Object.  
newValue System.Object.
```

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OnValidate Method

Note: This documentation is preliminary and is subject to change.

Definition

```
Overrides Protected Sub OnValidate( _  
Visual Basic ByVal element As Object _  
)  
protected override void OnValidate(  
C# object element  
);  
protected: void OnValidate(  
Managed C++ Object* element  
);  
protected override function OnValidate(  
JScript element : Object  
) : void;
```

Parameters

element System.Object.

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Remove Method

Note: This documentation is preliminary and is subject to change.

Removes the first occurrence of a specific IItemElement from the ItemElementCollection.

Definition

```
Public Sub Remove(  
Visual Basic ByVal element As IItemElement _  
)
```

```

C#     public void Remove(
            IItemElement element
        );
        public: void Remove(
    Managed C++   IItemElement* element
        );
        public function Remove(
    JScript      element : IItemElement
        ) : void;

```

Parameters

element **System.Speech.Srgs.IItemElement**. The IItemElement being removed from the ItemElementCollection.

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Item Property

Note: This documentation is preliminary and is subject to change.

Retrieves a child element of the Item class instance from the IItemElementCollection using its index value.

Definition

```

Visual Basic  Public Property Item( _
                  ByVal index As Integer _
                ) As IItemElement
                public IItemElement this[
                    int index
                ] { get; set; }
                public: __property IItemElement* get_Item(
                    int index
                );
Managed C++ public: __property void set_Item(
                    int index,
                    IItemElement*
                );
JScript      In JScript, you can use indexed properties, but you cannot define your own.

```

Property Value

System.Speech.Srgs.IItemElement.

This property is read/write.

Parameters

index **System.Int32**. Value indicating the child element's location within the ItemElementCollection.

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OneOf Class

Note: This documentation is preliminary and is subject to change.

Represents the World Wide Web Consortium (W3C) Speech Recognition Grammar Specification (SRGS) one-of element. See <http://www.w3.org/TR/speech-grammar/> for more information.

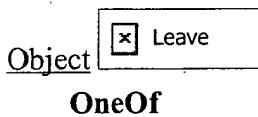
Definition

Public Class **OneOf**

Visual Basic	Inherits <i>Object</i> Implements <i>IItemElement</i> , <i>IRuleElement</i>
C#	public class OneOf : <i>Object</i> , <i>IItemElement</i> , <i>IRuleElement</i>
Managed C++	public __gc class OneOf : public <i>Object</i> , <i>IItemElement</i> , <i>IRuleElement</i>
JScript	public class OneOf extends <i>Object</i> implements <i>IRuleElement</i> , <i>IItemElement</i>

Members Table

Inheritance Hierarchy



Class Information

Namespace System.Speech.Srgs
Assembly System.Speech (system.speech.dll)
Strong Name System.Speech, Version=6.0.4044.0, Culture=neutral,
PublicKeyToken=365143bb27e7ac8b

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OneOf Method

Note: This documentation is preliminary and is subject to change.

Initializes a new instance of the OneOf class.

Overload List

```
public OneOf()  
public OneOf(String[])  
public OneOf(IItemElement[])
```

Examples

The following code example populates a OneOf element with a list of colors.

```
// Build ChangeColor grammar      ChangeColorGrammar = new Srsgs.SrgsGrammar("Ch  
' Build ChangeColor grammar      ChangeColorGrammar = New Srsgs.SrgsGrammar("Cha
```

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Elements Property

Note: This documentation is preliminary and is subject to change.

Gets the collection of all the child elements of the OneOf class instance.

Definition

```
Visual Basic Public ReadOnly Property Elements As OneOfElementCollection  
C#     public OneOfElementCollection Elements { get; }  
Managed C++ public: __property OneOfElementCollection* get_Elements();  
JScript    public function get Elements() : OneOfElementCollection
```

Property Value

System.Speech.Srgs.OneOfElementCollection.

This property is read-only.

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OneOfElementCollection Class

Note: This documentation is preliminary and is subject to change.

Represents a collection of objects that can be child elements of an OneOf class instance.

Definition

Visual Basic Public Class **OneOfElementCollection**
 Inherits *CollectionBase*

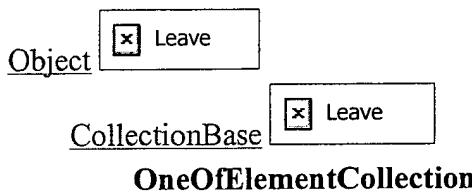
C# public class **OneOfElementCollection** : *CollectionBase*

Managed C++ public __gc class **OneOfElementCollection** : public *CollectionBase*

JScript public class **OneOfElementCollection** extends *CollectionBase*

Members Table

Inheritance Hierarchy



Class Information

Namespace System.Speech.Srgs

Assembly System.Speech (system.speech.dll)

Strong System.Speech, Version=6.0.4044.0, Culture=neutral,

Name PublicKeyToken=365143bb27e7ac8b

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Add Method

Note: This documentation is preliminary and is subject to change.

Adds an Item class instance to the the OneOfElementCollection.

Definition

Visual Basic Public Function **Add**(
 ByVal *item* As **Item**)

```
C#           ) As Integer
            public int Add(
                Item item
            );
            public: int Add(
Managed C++  Item* item
            );
            public function Add(
JScript       item : Item
            ) : int;
```

Parameters

item **System.Speech.Srgs.Item**. The Item class instance being added to the OneOfElementCollection.

Return Value

System.Int32.

The OneOfElementCollection index where the Item class instance has been added.

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AddItem Method

Note: This documentation is preliminary and is subject to change.

Adds a new Item class instance to the OneOfElementCollection.

Overload List

```
public Void AddItem (Item)
public Item AddItem ()
public Item AddItem (String)
public Item AddItem (String, String)
public Item AddItem (String, String, Object)
```

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AddItems Method

Note: This documentation is preliminary and is subject to change.

Adds two Item class instances to the OneOfElementCollection. Each Item class instance contains text.

Overload List

```
public Item AddItems (String, String)  
public Item AddItems (String, String, String)  
public Item AddItems (String[])
```

Remarks

This is essentially a macro for calling the AddItem method twice.

This is essentially a macro for calling the AddItem method three times

This is essentially a macro for calling the AddItem method multiple times.

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AddOptionalItem Method

Note: This documentation is preliminary and is subject to change.

Adds a new optional Item class instance to the OneOfElementCollection.

Overload List

```
public Item AddOptionalItem ()  
public Item AddOptionalItem (String)
```

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AddRepeatingItem Method

Note: This documentation is preliminary and is subject to change.

Adds a new Item class instance to the OneOfElementCollection. This instance contains the minimum and maximum number of repetitions required for successful recognition.

Definition

Public Function **AddRepeatingItem(**

```

Visual Basic    ByVal minRepeat As Integer, _
                  ByVal maxRepeat As Integer _
                  ) As Item
                  public Item AddRepeatingItem(
C#                  int minRepeat,
                  int maxRepeat
                  );
                  public: Item* AddRepeatingItem(
Managed C++    int minRepeat,
                  int maxRepeat
                  );
                  public function AddRepeatingItem(
JScript                  minRepeat : int,
                  maxRepeat : int
                  ) : Item;

```

Parameters

minRepeat **System.Int32.** Minimum number of occurrences the new Item object must occur.
maxRepeat **System.Int32.** Maximum number of occurrences of the new Item object can occur.

Return Value

System.Speech.Srgs.Item.

Returns the newly added Item class instance.

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Contains Method

Note: This documentation is preliminary and is subject to change.

Determines whether the OneOfElementCollection contains the specified Item class instance.

Definition

```

Visual Basic    Public Function Contains( _
                  ByVal item As Item _
                  ) As Boolean
                  public bool Contains(
C#                  Item item
                  );

```

```
public: bool Contains(  
Managed C++ Item* item  
);  
public function Contains(  
JScript item : Item  
) : boolean;
```

Parameters

item System.Speech.Srgs.Item. The Item class instance being located within the OneOfElementCollection.

Return Value

System.Boolean.

Returns true if the OneOfElementCollection contains the specified Item class instance; otherwise returns false.

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IndexOf Method

Note: This documentation is preliminary and is subject to change.

Searches for the specified Item class instance and returns the zero-based index of its first occurrence within the OneOfElementCollection.

Definition

```
Public Function IndexOf(  
Visual Basic ByVal item As Item  
) As Integer  
public int IndexOf(  
C# Item item  
);  
public: int IndexOf(  
Managed C++ Item* item  
);  
public function IndexOf(  
JScript item : Item  
) : int;
```

Parameters

item **System.Speech.Srgs.Item**. The Item class instance being searched for within the OneOfElementCollection.

Return Value

System.Int32.

Returns the zero-based index of the first occurrence of the Item object within the OneOfElementCollection, if found; otherwise returns -1.

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Insert Method

Note: This documentation is preliminary and is subject to change.

Inserts an Item class instance into the OneOfElementCollection at the specified index location.

Definition

```
Visual Basic  Public Sub Insert(  
                      ByVal index As Integer,  
                      ByVal item As Item  
                      )  
  public void Insert(  
    int index,  
    Item item  
  );  
  public: void Insert(  
    int index,  
    Item* item  
  );  
  public function Insert(  
    index : int,  
    item : Item  
  ) : void;
```

Managed C++

```
JScript
```

Parameters

index **System.Int32**. The zero-based index location where the Item class instance is to be inserted.

item **System.Speech.Srgs.Item**. The Item class instance being inserted.

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OnClear Method

Note: This documentation is preliminary and is subject to change.

Definition

Visual Basic Overrides Protected Sub **OnClear()**

C# protected override **void** **OnClear()**;

Managed C++ protected: **void** **OnClear()**;

JScript protected override function **OnClear()** : **void**;

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OneOfElementCollection Method

Note: This documentation is preliminary and is subject to change.

Initializes a new instance of the OneOfElementCollection and specifies the owning OneOf class instance.

Definition

Public Sub **OneOfElementCollection**(

Visual Basic ByVal *owner* As **OneOf**

)

C# public **OneOfElementCollection**(

OneOf *owner*

);

Managed C++ public: **OneOfElementCollection**(

OneOf* *owner*

);

JScript public function **OneOfElementCollection**(

owner : **OneOf**

);

Parameters

owner **System.Speech.Srgs.OneOf**. Owning OneOf class instance.

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OnInsert Method

Note: This documentation is preliminary and is subject to change.

Definition

```
Overrides Protected Sub OnInsert(_
  ByVal index As Integer,_
  ByVal value As Object_
)
protected override void OnInsert(
  int index,_
  object value
);
protected: void OnInsert(_
  int index,_
  Object* value
);
protected override function OnInsert(_
  index : int,_
  value : Object
) : void;
```

Parameters

index **System.Int32**.
value **System.Object**.

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OnRemove Method

Note: This documentation is preliminary and is subject to change.

Definition

```
Overrides Protected Sub OnRemove(_
  ByVal index As Integer,_
  ByVal value As Object_
)
protected override void OnRemove(
  int index,_
  object value
);
```

```
protected: void OnRemove(  
Managed C++      int index,  
                  Object* value  
                  );  
protected override function OnRemove(  
JScript            index : int,  
                  value : Object  
                  ) : void;
```

Parameters

index **System.Int32**.
value **System.Object**.

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OnSet Method

Note: This documentation is preliminary and is subject to change.

Definition

```
Overrides Protected Sub OnSet(  
Visual Basic      ByVal index As Integer,  
                  ByVal oldValue As Object,  
                  ByVal newValue As Object  
                  )  
protected override void OnSet(  
C#                int index,  
                  object oldValue,  
                  object newValue  
                  );  
protected: void OnSet(  
Managed C++      int index,  
                  Object* oldValue,  
                  Object* newValue  
                  );  
protected override function OnSet(  
                  index : int,  
JScript            oldValue : Object,  
                  newValue : Object  
                  ) : void;
```

Parameters

index **System.Int32**.
oldValue **System.Object**.
newValue **System.Object**.

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OnValidate Method

Note: This documentation is preliminary and is subject to change.

Definition

Visual Basic Overrides Protected Sub **OnValidate**(
 item As **Object**
)
 protected override **void** **OnValidate**(
 item
);
 protected: **void** **OnValidate**(
Managed C++ **Object*** *item*
);
 protected override function **OnValidate**(
JScript *item* : **Object**
) : **void**;

Parameters

item **System.Object**.

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Remove Method

Note: This documentation is preliminary and is subject to change.

Removes the first occurrence of the specified Item class instance from the OneOfElementCollection.

Definition

Visual Basic Public Sub **Remove**(
 item As **Item**
)

```

C#      public void Remove(
        Item item
    );
    public: void Remove(
Managed C++ Item* item
);
    public function Remove(
JScript      item : Item
) : void;

```

Parameters

item **System.Speech.Srgs.Item**. The Item class instance to remove from the OneOfElementCollection.

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Item Property

Note: This documentation is preliminary and is subject to change.

Retrieves an Item class instance from the OneOfElementCollection using the specified index.

Definition

```

Visual Basic  Public Property Item( _
                  ByVal index As Integer _
              ) As Item
              public Item this[
                  int index
              ] { get; set; }
              public: property Item* get_Item(
                  int index
              );
Managed C++ public: property void set_Item(
                  int index,
                  Item*
              );
JScript      In JScript, you can use indexed properties, but you cannot define your own.

```

Property Value

System.Speech.Srgs.Item.

This property is read/write.

Parameters

index **System.Int32**. Index value.

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PropertyTag Class

Note: This documentation is preliminary and is subject to change.

Represents the World Wide Web Consortium (W3C) Speech Recognition Grammar Specification (SRGS) tag element with SAPI Properties. See <http://www.w3.org/TR/speech-grammar/> for more information.

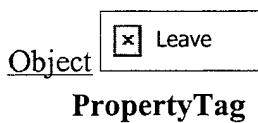
Definition

Public Class **PropertyTag**

Visual Basic	Inherits <i>Object</i> Implements <i>IItemElement</i> , <i>IRuleElement</i>
C#	public class PropertyTag : <i>Object</i> , <i>IItemElement</i> , <i>IRuleElement</i>
Managed C++	public __gc class PropertyTag : public <i>Object</i> , <i>IItemElement</i> , <i>IRuleElement</i>
JScript	public class PropertyTag extends <i>Object</i> implements <i>IRuleElement</i> , <i>IItemElement</i>

Members Table

Inheritance Hierarchy



Class Information

Namespace System.Speech.Srgs
Assembly System.Speech (system.speech.dll)
Strong Name System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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PropertyTag Method

Note: This documentation is preliminary and is subject to change.

Initializes a new instance of the PropertyTag class.

Overload List

```
public PropertyTag()  
public PropertyTag(String)  
public PropertyTag(String, Object)
```

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ToString Method

Note: This documentation is preliminary and is subject to change.

Definition

Visual Basic Overrides Public Function `ToString()` As String

C# public override string `ToString()`;

Managed C++ public: String* `ToString()`;

JScript public override function `ToString()` : String;

Return Value

System.String.

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Name Property

Note: This documentation is preliminary and is subject to change.

Gets and sets the name of the semantic property contained within the PropertyTag class instance.

Definition

Visual Basic Public Property `Name` As String

C#	public <u>string</u> Name { get; set; }
Managed C++	public: <u>property String*</u> get_Name(); public: <u>property void</u> set_Name(<u>String*</u>);
JScript	public function get Name() : <u>String</u> public function set Name(<u>String</u>);

Property Value

System.String.

This property is read/write.

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Value Property

Note: This documentation is preliminary and is subject to change.

Gets and sets the value of semantic property contained within the PropertyTag class instance.

Definition

Visual Basic Public Property Value As Object

C#	public <u>object</u> Value { get; set; }
Managed C++	public: <u>property Object*</u> get_Value(); public: <u>property void</u> set_Value(<u>Object*</u>);
JScript	public function get Value() : <u>Object</u> public function set Value(<u>Object</u>);

Property Value

System.Object.

This property is read/write.

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Rule Class

Note: This documentation is preliminary and is subject to change.

Represents the World Wide Web Consortium (W3C) Speech Recognition Grammar Specification (SRGS) rule element. See <http://www.w3c.org/TR/speech-grammar/> for more information.

Definition

Visual Basic Public Class **Rule**
 Inherits Object

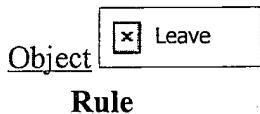
C# public class **Rule** : Object

Managed C++ public __gc class **Rule** : public Object

JScript public class **Rule** extends Object

Members Table

Inheritance Hierarchy



Class Information

Namespace System.Speech.Srgs
Assembly System.Speech (system.speech.dll)
Strong Name System.Speech, Version=6.0.4044.0, Culture=neutral,
PublicKeyToken=365143bb27e7ac8b

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GetXml Method

Note: This documentation is preliminary and is subject to change.

Gets the Extensible Markup Language (XML) markup for this Rule class instance.

Definition

Visual Basic Public Function **GetXml()** As String
C# public string **GetXml()**;

Managed C++ public: String* **GetXml()**;

JScript public function **GetXml()** : String;

Return Value

System.String.

Returns the XML markup of the Rule class instance.

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Rule Method

Note: This documentation is preliminary and is subject to change.

Initializes a new instance of the Rule class.

Overload List

```
public Rule()  
public Rule(String)
```

Remarks

If the Name property is not set prior to committing the grammar that contains this rule, a unique name is assigned automatically.

The name property refers to the ID property of the RULE W3C SRGS element.

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ToString Method

Note: This documentation is preliminary and is subject to change.

Returns a string representation of this Rule class instance.

Definition

Visual Basic Overrides Public Function **ToString()** As [String](#)

C# public override [string](#) **ToString()**;

Managed C++ public: [String](#)* **ToString()**;

JScript public override function **ToString()** : [String](#);

Return Value

[System.String](#).

Returns a text string describing the Rule class instance.

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Elements Property

Note: This documentation is preliminary and is subject to change.

Gets the collection of all the child elements of the Rule class instance.

Definition

Visual Basic Public ReadOnly Property **Elements** As RuleElementCollection

C# public RuleElementCollection **Elements** { get; }

Managed C++ public: __property RuleElementCollection* get_Elements();

JScript public function get **Elements()** : RuleElementCollection

Property Value

System.Speech.Srgs.RuleElementCollection.

This property is read-only.

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Id Property

Note: This documentation is preliminary and is subject to change.

Gets and sets the name of the Rule class instance.

Definition

Visual Basic Public Property **Id** As String

C# public string **Id** { get; set; }

Managed C++ public: __property String* get_Id();
public: __property void set_Id(String*);

JScript public function get **Id()** : String
public function set **Id(String)**;

Property Value

System.String.

This property is read/write.

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Scope Property

Note: This documentation is preliminary and is subject to change.

Gets and Sets how a rule is referenced by other rules, and whether or not the rule can be activated or not. See [RuleScope](#) for more information.

Definition

Visual Basic Public Property Scope As [RuleScope](#)

C# public [RuleScope](#) Scope { get; set; }

Managed C++ public: __property [RuleScope](#) get_Scope();
public: __property void set_Scope([RuleScope](#));

JScript public function get Scope() : [RuleScope](#)
public function set Scope([RuleScope](#));

Property Value

[System.Speech.Srgs.RuleScope](#).

This property is read/write.

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RuleCollection Class

Note: This documentation is preliminary and is subject to change.

Represents a collection of objects that can be child elements of a Rule class instance.

Definition

Visual Basic Public Class [RuleCollection](#)
Inherits [CollectionBase](#)

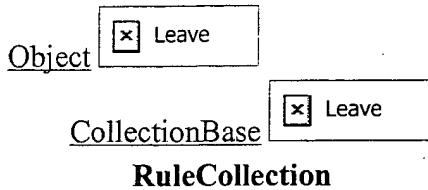
C# public class [RuleCollection](#) : [CollectionBase](#)

Managed C++ public __gc class [RuleCollection](#) : public [CollectionBase](#)

JScript public class [RuleCollection](#) extends [CollectionBase](#)

Members Table

Inheritance Hierarchy



Class Information

Namespace System.Speech.Srgs
Assembly System.Speech (system.speech.dll)
Strong Name System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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Add Method

Note: This documentation is preliminary and is subject to change.

Adds a Rule class instance to the RuleCollection.

Definition

```
Public Function Add( _
  ByVal rule As Rule _
) As Integer
public int Add(
  Rule rule
);
public: int Add(
  Rule* rule
);
public function Add(
  rule : Rule
) : int;
```

Parameters

rule **System.Speech.Srgs.Rule**. The Rule class instance being added to the RuleCollection.

Return Value

System.Int32.

The RuleCollection index at which the value has been added.

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AddRule Method

Note: This documentation is preliminary and is subject to change.

Adds a new Rule class instance to the RuleCollection.

Overload List

```
public Rule AddRule ()  
public Rule AddRule (String)  
public Rule AddRule (Rule)
```

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Contains Method

Note: This documentation is preliminary and is subject to change.

Determines whether the RuleCollection contains the specified Rule class instance.

Definition

	Public Function Contains (
Visual Basic	ByVal <i>rule</i> As <u>Rule</u>
) As <u>Boolean</u>
	public <u>bool</u> Contains (
C#	<u>Rule</u> <i>rule</i>
);
	public: <u>bool</u> Contains (
Managed C++	<u>Rule*</u> <i>rule</i>
);
	public function Contains (
JScript	<i>rule</i> : <u>Rule</u>
) : <u>boolean</u> ;

Parameters

rule System.Speech.Srgs.Rule. The Rule class instance being located within the

RuleCollection.

Return Value

System.Boolean. Returns true if the RuleCollection contains the specified Rule class instance; otherwise returns false.

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get_Item Method

Note: This documentation is preliminary and is subject to change.

Overload List

```
public Rule get_Item (Int32)
public Rule get_Item (String)
```

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IndexOf Method

Note: This documentation is preliminary and is subject to change.

Searches for the specified Rule class instance and returns the zero-based index of its first occurrence within the RuleCollection.

Overload List

```
public Int32 IndexOf (Rule)
public Int32 IndexOf (String)
```

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Insert Method

Note: This documentation is preliminary and is subject to change.

Inserts a Rule class instance into the RuleCollection at the specified index location.

Definition

```

Visual Basic  Public Sub Insert(  

                  ByVal index As Integer,  

                  ByVal rule As Rule  

              )  

C#          public void Insert(  

                  int index,  

                  Rule rule  

              );  

Managed C++ public: void Insert(  

                  int index,  

                  Rule* rule  

              );  

JScript      public function Insert(  

                  index : int,  

                  rule : Rule  

              ) : void;

```

Parameters

index **System.Int32**. The zero-based index location where the Rule class instance is to be inserted.

rule **System.Speech.Srgs.Rule**. The Rule class instance being inserted.

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OnClear Method

Note: This documentation is preliminary and is subject to change.

Definition

Visual Basic Overrides Protected Sub **OnClear()**

C# protected override void **OnClear()**;

Managed C++ protected: void **OnClear()**;

JScript protected override function **OnClear()** : void;

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OnInsert Method

Note: This documentation is preliminary and is subject to change.

Definition

Overrides Protected Sub **OnInsert**(
Visual Basic *ByVal index As Integer,*
 ByVal value As Object
)
 protected override **void OnInsert**(
C# *int index,*
 object value
);
 protected: **void OnInsert**(
Managed C++ *int index,*
 Object value*
);
 protected override function **OnInsert**(
JScript *index : int,*
 value : Object
) : **void**;

Parameters

index **System.Int32**.
value **System.Object**.

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OnRemove Method

Note: This documentation is preliminary and is subject to change.

Definition

Overrides Protected Sub **OnRemove**(
Visual Basic *ByVal index As Integer,*
 ByVal value As Object
)
 protected override **void OnRemove**(
C# *int index,*
 object value
);
 protected: **void OnRemove**(
Managed C++ *int index,*
 Object value*

```

);
protected override function OnRemove(
  index : int,
  value : Object
) : void;

```

Parameters

index **System.Int32**.
value **System.Object**.

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OnSet Method

Note: This documentation is preliminary and is subject to change.

Definition

```

Overrides Protected Sub OnSet(_
  ByVal index As Integer,
  ByVal oldValue As Object,
  ByVal newValue As Object
)
protected override void OnSet(_
  int index,
  object oldValue,
  object newValue
);
protected: void OnSet(_
  int index,
  Object* oldValue,
  Object* newValue
);
protected override function OnSet(_
  index : int,
  oldValue : Object,
  newValue : Object
) : void;

```

Parameters

index **System.Int32**.
oldValue **System.Object**.
newValue **System.Object**.

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OnValidate Method

Note: This documentation is preliminary and is subject to change.

Definition

```
Visual Basic    Overrides Protected Sub OnValidate( _
                  ByVal rule As Object _
                )
C#              protected override void OnValidate(
                  object rule
                );
protected: void OnValidate(
Managed C++    Object* rule
                );
protected override function OnValidate(
JScript        rule : Object
                ) : void;
```

Parameters

rule **System.Object**.

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Remove Method

Note: This documentation is preliminary and is subject to change.

Removes the first occurrence of a specified Rule class instance from the RuleCollection.

Definition

```
Visual Basic    Public Sub Remove( _
                  ByVal rule As Rule _
                )
C#              public void Remove(
                  Rule rule
                );
Managed C++    public: void Remove(
                  Rule* rule
```

```
        );
    public function Remove(
        rule : Rule
    ) : void;
```

Parameters

rule **System.Speech.Srgs.Rule**. The Rule class instance to remove from the RuleCollection.

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RuleCollection Method

Note: This documentation is preliminary and is subject to change.

Initializes a new instance of the RuleCollection and specifies the owning Grammar class instance.

Definition

```
Visual Basic  Public Sub RuleCollection( _
                  ByVal owner As SrgsGrammar _
                )
  public RuleCollection(
    SrgsGrammar owner
  );
  public: RuleCollection(
    SrgsGrammar* owner
  );
  public function RuleCollection(
    owner : SrgsGrammar
  );
```

Parameters

owner **System.Speech.Srgs.SrgsGrammar**. Owning Grammar class instance.

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set_Item Method

Note: This documentation is preliminary and is subject to change.

Overload List

```
public Void set_Item (Int32, Rule)
public Void set_Item (String, Rule)
```

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Item Property

Note: This documentation is preliminary and is subject to change.

Retrieves a Rule class instance from the RuleCollection using the specified name.

Overload List

```
public Rule Item (String)
public Rule Item (Int32)
```

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RuleElementCollection Class

Note: This documentation is preliminary and is subject to change.

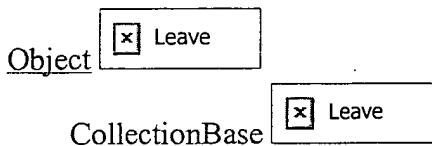
Represents a collection of objects that are valid within a Rule class instance.

Definition

Visual Basic	Public Class RuleElementCollection Inherits <i>CollectionBase</i>
C#	public class RuleElementCollection : <i>CollectionBase</i>
Managed C++	public __gc class RuleElementCollection : public <i>CollectionBase</i>
JScript	public class RuleElementCollection extends <i>CollectionBase</i>

Members Table

Inheritance Hierarchy



RuleElementCollection

Class Information

Namespace System.Speech.Srgs
Assembly System.Speech (system.speech.dll)
Strong Name System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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Add Method

Note: This documentation is preliminary and is subject to change.

Adds an Example class instance to the RuleElementCollection.

Overload List

[public Int32 Add \(Example\)](#)
[public Int32 Add \(Item\)](#)
[public Int32 Add \(OneOf\)](#)
[public Int32 Add \(RuleRef\)](#)
[public Int32 Add \(SpecialRuleRef\)](#)
[public Int32 Add \(Tag\)](#)
[public Int32 Add \(Token\)](#)
[public Int32 Add \(SrgsText\)](#)
[public Int32 Add \(String\)](#)

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AddExample Method

Note: This documentation is preliminary and is subject to change.

Adds a Example class instance to the RuleElementCollection.

Overload List

[public Void AddExample \(Example\)](#)
[public Example AddExample \(String\)](#)

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AddItem Method

Note: This documentation is preliminary and is subject to change.

Adds a Item class instance to the RuleElementCollection.

Overload List

```
public Void AddItem (Item)  
public Item AddItem ()  
public Item AddItem (String)  
public Item AddItem (String, String)  
public Item AddItem (String, String, Object)
```

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AddItems Method

Note: This documentation is preliminary and is subject to change.

Adds two Item class instances to the RuleElementCollection. Both Item class instances contain text.

Overload List

```
public Item AddItems (String, String)  
public Item AddItems (String, String, String)  
public Item AddItems (String[])
```

Remarks

This method is essentially a macro for calling the AddItem method twice.

This method is essentially a macro for calling the AddItem method three times

This method is essentially a macro for calling the AddItem method multiple times.

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AddOneOf Method

Note: This documentation is preliminary and is subject to change.

Adds a OneOf class instance to the RuleElementCollection.

Overload List

```
public Void AddOneOf(OneOf)  
public OneOf AddOneOf()  
public OneOf AddOneOf(String, String)  
public OneOf AddOneOf(String, String, String)  
public OneOf AddOneOf(String[])  
public OneOf AddOneOf(Item[])
```

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AddOptionalItem Method

Note: This documentation is preliminary and is subject to change.

Adds a new optional Item class instance to the RuleElementCollection.

Overload List

```
public Item AddOptionalItem()  
public Item AddOptionalItem(String)
```

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AddRepeatingItem Method

Note: This documentation is preliminary and is subject to change.

Adds an Item class instance to the RuleElementCollection. The Item class instance being added either must be repeated the specified minimum number of times, or can be repeated up to the specified maximum number of times.

Definition

```

Public Function AddRepeatingItem( _
  ByVal minRepeat As Integer, _
  ByVal maxRepeat As Integer _
) As Item
  public Item AddRepeatingItem(
    int minRepeat,
    int maxRepeat
  );
  public: Item* AddRepeatingItem(
    int minRepeat,
    int maxRepeat
  );
  public function AddRepeatingItem(
    minRepeat : int,
    maxRepeat : int
  ) : Item;

```

Parameters

minRepeat **System.Int32**. Minimum number of times the new Item class instance must be repeated for a successful recognition.

maxRepeat **System.Int32**. Maximum number of times the new Item class instance can be repeated for a successful recognition.

Return Value

System.Speech.Srgs.Item.

Returns the newly added Item class instance.

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AddRuleRef Method

Note: This documentation is preliminary and is subject to change.

Adds a RuleRef class instance to the RuleElementCollection.

Overload List

```

public Void AddRuleRef (RuleRef)
public RuleRef AddRuleRef (String)
public RuleRef AddRuleRef (Rule)

```

Remarks

This method can also be used to refer to dictation grammars. The general dictation model is referenced by: AddRuleRef("recognitiontopic:general"); and a specific topic by, for example: AddRuleRef("recognitiontopic:spelling");

If the rule is part of the same grammar, the rule reference is a local reference. If the rule is part of another grammar, the rule reference is automatically determined based on the grammar that the rule comes from.

For example, if the rule is part of a grammar that was loaded with a call to Grammar.Load, the URI specified in that call will be used and the Rule.Id will be used for the local part. The URI will appear in the form: "{0}#{1}", where 0=URI from Grammar.Load, and 1=Rule.Id. Another example is if the rule is part of a grammar that's been built dynamically the rule will automatically be added (at Commit time) to the Grammar that this rule reference is a part of, if it doesn't already appear there.

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AddSpecialRuleRef Method

Note: This documentation is preliminary and is subject to change.

Adds a SpecialRuleRef class instance to the RuleElementCollection.

Definition

```
Public Sub AddSpecialRuleRef(  
    Visual Basic    ByVal specialRuleRef As SpecialRuleRef  
    )  
    public void AddSpecialRuleRef(  
        C#           SpecialRuleRef specialRuleRef  
        );  
        public: void AddSpecialRuleRef(  
            Managed C++  SpecialRuleRef* specialRuleRef  
            );  
            public function AddSpecialRuleRef(  
                JScript      specialRuleRef: SpecialRuleRef  
                ): void;
```

Parameters

specialRuleRef **System.Speech.Srgs.SpecialRuleRef**. The SpecialRuleRef class instance being added to the RuleElementCollection.

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AddTag Method

Note: This documentation is preliminary and is subject to change.

Adds a Tag class instance to the RuleElementCollection.

Overload List

```
public Void AddTag (Tag)  
public Tag AddTag (String)
```

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AddToken Method

Note: This documentation is preliminary and is subject to change.

Adds a Token class instance to the RuleElementCollection.

Overload List

```
public Void AddToken (Token)  
public Token AddToken (String)  
public Token AddToken (String, String)
```

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Contains Method

Note: This documentation is preliminary and is subject to change.

Determines whether the RuleElementCollection contains the specified IRuleElement.

Definition

```
Public Function Contains(  
Visual Basic    ByVal element As IRuleElement  
                 ) As Boolean  
C#              public bool Contains(  
                    IRuleElement element  
                    );
```

```

Managed C++ public: bool Contains(  

    IRuleElement* element  

);
JScript public function Contains(  

    element : IRuleElement  

) : boolean;

```

Parameters

element **System.Speech.Srgs.IRuleElement**. The **IRuleElement** being located within the **RuleElementCollection**.

Return Value

System.Boolean.

Returnstrue if the RuleElementCollection contains the specified **IRuleElement** object; otherwise returns false.

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IndexOf Method

Note: This documentation is preliminary and is subject to change.

Searches for the specified **IRuleElement** and returns the zero-based index of its first occurrence within the **RuleElementCollection**.

Definition

```

Visual Basic Public Function IndexOf(  

    ByVal element As IRuleElement  

) As Integer
C# public int IndexOf(  

    IRuleElement element  

);
Managed C++ public: int IndexOf(  

    IRuleElement* element  

);
JScript public function IndexOf(  

    element : IRuleElement  

) : int;

```

Parameters

element **System.Speech.Srgs.IRuleElement**. The IRuleElement being searched for within the RuleElementCollection.

Return Value

System.Int32.

Returns the zero-based index of the first occurrence of the IRuleElement object within the RuleElementCollection, if found; otherwise returns -1.

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Insert Method

Note: This documentation is preliminary and is subject to change.

Inserts a new IRuleElement into the RuleElementCollection at the specified index location.

Definition

```
Visual Basic  Public Sub Insert(  
                      ByVal index As Integer,  
                      ByVal element As IRuleElement  
                      )  
  public void Insert(  
    int index,  
    IRuleElement element  
  );  
  public: void Insert(  
    int index,  
    IRuleElement* element  
  );  
  public function Insert(  
    index : int,  
    element : IRuleElement  
  ) : void;
```

C#

```
Managed C++
```

JScript

Parameters

index **System.Int32**. The zero-based index location where the IRuleElement is being inserted.

element **System.Speech.Srgs.IRuleElement**. The new IRuleElement being inserted.

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OnClear Method

Note: This documentation is preliminary and is subject to change.

Definition

Visual Basic Overrides Protected Sub **OnClear()**

C# protected override **void** **OnClear()**;

Managed C++ protected: **void** **OnClear()**;

JScript protected override function **OnClear()** : **void**;

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OnInsert Method

Note: This documentation is preliminary and is subject to change.

Definition

Overrides Protected Sub **OnInsert(**

Visual Basic **ByVal** *index* **As** **Integer**,
ByVal *value* **As** **Object**
)

protected override **void** **OnInsert(**

C# **int** *index*,
object *value*
);

protected: **void** **OnInsert(**

Managed C++ **int** *index*,
Object* *value*
);

protected override function **OnInsert(**

JScript *index* : **int**,
value : **Object**
) : **void**;

Parameters

index **System.Int32**.

value **System.Object**.

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OnRemove Method

Note: This documentation is preliminary and is subject to change.

Definition

Overrides Protected Sub **OnRemove**(
 `Visual Basic` `ByVal index As Integer,`
 `ByVal value As Object`
 `)`
 `C#` `protected override void OnRemove(`
 `int index,`
 `object value`
 `);`
 `protected: void OnRemove(`
 `Managed C++` `int index,`
 `Object* value`
 `);`
 `protected override function OnRemove(`
 `JScript` `index : int,`
 `value : Object`
 `) : void;`

Parameters

`index` **System.Int32**.
`value` **System.Object**.

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OnSet Method

Note: This documentation is preliminary and is subject to change.

Definition

Overrides Protected Sub **OnSet**(
 `Visual Basic` `ByVal index As Integer,`
 `ByVal oldValue As Object,`
 `ByVal newValue As Object`
 `)`
 `C#` `protected override void OnSet(`
 `int index,`
 `object oldValue,`

```

        object newValue
    );
    protected: void OnSet(
        int index,
Managed C++    Object* oldValue,
        Object* newValue
    );
    protected override function OnSet(
        index : int,
JScript        oldValue : Object,
        newValue : Object
    ) : void;

```

Parameters

```

index      System.Int32.
oldValue   System.Object.
newValue   System.Object.

```

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OnValidate Method

Note: This documentation is preliminary and is subject to change.

Definition

```

Overrides Protected Sub OnValidate(
    Visual Basic    ByVal element As Object
    )
protected override void OnValidate(
    C#            object element
    );
protected: void OnValidate(
Managed C++    Object* element
    );
protected override function OnValidate(
JScript        element : Object
    ) : void;

```

Parameters

```

element System.Object.

```

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Remove Method

Note: This documentation is preliminary and is subject to change.

Removes the first occurrence of a specified **IRuleElement** from the **RuleElementCollection**.

Definition

```
Visual Basic  Public Sub Remove( _
                  ByVal element As IRuleElement _
                )
C#           public void Remove(
                  IRuleElement element
                );
Managed C++  public: void Remove(
                  IRuleElement* element
                );
JScript       public function Remove(
                  element : IRuleElement
                ) : void;
```

Parameters

element **System.Speech.Srgs.IRuleElement**. The **IRuleElement** being removed from the **RuleElementCollection**.

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RuleElementCollection Method

Note: This documentation is preliminary and is subject to change.

Creates a new **RuleElementCollection** and identifies its owning **Rule** class instance.

Definition

```
Visual Basic  Public Sub RuleElementCollection( _
                  ByVal owner As Rule _
                )
C#           public RuleElementCollection(
                  Rule owner
                );
```

```
public: RuleElementCollection(  
Managed C++ Rule* owner  
);  
public function RuleElementCollection(  
JScript owner: Rule  
);
```

Parameters

owner **System.Speech.Srgs.Rule**. Name of the Rule class instance associated with the RuleElementCollection.

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Item Property

Note: This documentation is preliminary and is subject to change.

Retrieves an IRuleElement from the RuleElementCollection using a specified index value.

Definition

```
Public Property Item(  
Visual Basic ByVal index As Integer  
) As IRuleElement  
public IRuleElement this[  
C# int index  
] { get; set; }  
public: property IRuleElement* get_Item(  
    int index  
);  
Managed C++ public: property void set_Item(  
    int index,  
    IRuleElement*  
);  
JScript In JScript, you can use indexed properties, but you cannot define your own.
```

Property Value

System.Speech.Srgs.IRuleElement.

This property is read/write.

Parameters

index **System.Int32**. Index value of the *IRuleElement* within the *RuleElementCollection*.

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RuleRef Class

Note: This documentation is preliminary and is subject to change.

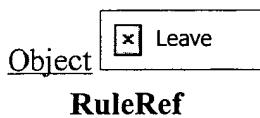
Example represents the World Wide Web Consortium (W3C) Speech Recognition Grammar Specification (SRGS) ruleref element. See <http://www.w3.org/TR/speech-grammar/> for more information.

Definition

	Public Class RuleRef
Visual Basic	Inherits <i>Object</i> Implements <i>IItemElement</i> , <i>IRuleElement</i>
C#	public class RuleRef : <i>Object</i> , <i>IItemElement</i> , <i>IRuleElement</i>
Managed C++	public __gc class RuleRef : public <i>Object</i> , <i>IItemElement</i> , <i>IRuleElement</i>
JScript	public class RuleRef extends <i>Object</i> implements <i>IRuleElement</i> , <i>IItemElement</i>

Members Table

Inheritance Hierarchy



Class Information

Namespace	System.Speech.Srgs
Assembly	System.Speech (system.speech.dll)
Strong Name	System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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RuleRef Method

Note: This documentation is preliminary and is subject to change.

Class constructor

Overload List

```
public RuleRef()  
public RuleRef(String)  
public RuleRef(Rule)
```

Remarks

If the rule is part of the same grammar, the rule reference is a local reference. If the rule is part of another grammar, the rule reference is automatically determined based on the grammar that the rule comes from.

For example, if the rule is part of a grammar that was loaded with a call to Grammar.Load, the URI specified in that call will be used and the Rule.Id will be used for the local part.

For example the URI will appear in the form: "{0}#{1}", where 0=URI from Grammar.Load, and 1=Rule.Id. Another example is if the rule is part of a grammar that's been built dynamically the rule will automatically be added (at Commit time) to the Grammar that this rule reference is a part of, if it doesn't already appear there.

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ToString Method

Note: This documentation is preliminary and is subject to change.

Definition

Visual Basic Overrides Public Function **ToString()** As **String**

C# public override **string** **ToString()**;

Managed C++ public: **String*** **ToString()**;

JScript public override function **ToString()** : **String**;

Return Value

System.String.

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Dictation Property

Note: This documentation is preliminary and is subject to change.

The Dictation SpecialRuleRef defines a rule that may match speech that matches the associated Dictation topic specified in the containing Grammar object.

Definition

Visual Basic Public Shared ReadOnly Property **Dictation** As **RuleRef**

C# public static **RuleRef** **Dictation** { get; }

Managed C++ public: __property static **RuleRef*** get_**Dictation**();

JScript public static function get **Dictation**() : **RuleRef**

Property Value

System.Speech.Srgs.RuleRef.

This property is read-only.

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Uri Property

Note: This documentation is preliminary and is subject to change.

Gets and sets the universal resource indicator (URI) of the rule to which this RuleRef object refers.

Definition

Visual Basic Public Property **Uri** As **String**

C# public **string** **Uri** { get; set; }

Managed C++ public: __property **String*** get_**Uri**();
public: __property void set_**Uri**(**String***);

JScript public function get **Uri**() : **String**
public function set **Uri**(**String**);

Property Value

System.String.

This property is read/write.

Remarks

This can also be used to refer to dictation grammars. The general dictation model is referenced by: AddRuleRef("recognitiontopic:general"); and a specific topic by, for example: AddRuleRef("recognitiontopic:spelling");

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SpecialRuleRef Class

Note: This documentation is preliminary and is subject to change.

SpecialRuleRef class instance allow grammars based on context-free grammars (CFG) to have powerful additional features, such as transitions into dictation (both recognized or not recognized) and word sequences from SAPI 5.0.

Definition

Visual Basic Public Class **SpecialRuleRef**
 Inherits Object
 Implements IItemElement, IRuleElement

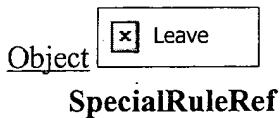
C# public class **SpecialRuleRef** : Object,
 IItemElement, IRuleElement

Managed C++ public __gc class **SpecialRuleRef** : public Object,
 IItemElement, IRuleElement

JScript public class **SpecialRuleRef** extends Object
 implements IRuleElement, IItemElement

Members Table

Inheritance Hierarchy



Class Information

Namespace System.Speech.Srgs
Assembly System.Speech (system.speech.dll)
Strong Name System.Speech, Version=6.0.4044.0, Culture=neutral,
 PublicKeyToken=365143bb27e7ac8b

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Garbage Property

Note: This documentation is preliminary and is subject to change.

Gets the Garbage SpecialRuleRef that specifies a rule that may match any speech up until the next rule match, the next token or until the end of spoken input.

Definition

Visual Basic Public Shared ReadOnly Property **Garbage** As SpecialRuleRef

C# public static SpecialRuleRef **Garbage** { get; }

Managed C++ public: __property static SpecialRuleRef* get_Garbage();

JScript public static function get **Garbage()** : SpecialRuleRef

Property Value

System.Speech.Srgs.SpecialRuleRef.

This property is read-only.

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Null Property

Note: This documentation is preliminary and is subject to change.

Gets The Null SpecialRuleRef that specifies a rule that is automatically matched without the user speaking any word.

Definition

Visual Basic Public Shared ReadOnly Property **Null** As SpecialRuleRef

C# public static SpecialRuleRef **Null** { get; }

Managed C++ public: __property static SpecialRuleRef* get_Null();

JScript public static function get **Null()** : SpecialRuleRef

Property Value

System.Speech.Srgs.SpecialRuleRef.

This property is read-only.

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Type Property

Note: This documentation is preliminary and is subject to change.

Gets and sets the type of a SpecialRuleRef class instance that specifies the behavior of the reference.

Definition

Visual Basic Public Property Type As SpecialRuleRefType

C# public SpecialRuleRefType Type { get; set; }

Managed C++ public: __property SpecialRuleRefType get_Type();
public: __property void set_Type(SpecialRuleRefType);

JScript public function get Type() : SpecialRuleRefType
public function set Type(SpecialRuleRefType);

Property Value

System.Speech.Srgs.SpecialRuleRefType.

This property is read/write.

Remarks

The type of the special rule reference specifies the behavior of the reference. For example, a special rule reference with a type of SpecialRuleRefType.Dictation, when included in a Rule, allows the rule to also include dictation as part of its context-free grammar recognition.

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Void Property

Note: This documentation is preliminary and is subject to change.

Gets the Void SpecialRuleRef that specifies a rule that can never be spoken. Inserting Void into a sequence automatically makes that sequence unspeakable.

Definition

Visual Basic Public Shared ReadOnly Property Void As SpecialRuleRef

C# public static SpecialRuleRef Void { get; }

```
Managed C++ public: __property static SpecialRuleRef* get_Void();
JScript    public static function get Void() : SpecialRuleRef
```

Property Value

System.Speech.Srgs.SpecialRuleRef.

This property is read-only.

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WordSequence Property

Note: This documentation is preliminary and is subject to change.

Gets the WordSequence SpecialRuleRef that species a rule that may match recognized speech from an associated text buffer, or word sequence, on the containing Grammar class instance.

Definition

```
Visual Basic Public Shared ReadOnly Property WordSequence As SpecialRuleRef
C#    public static SpecialRuleRef WordSequence { get; }
Managed C++ public: __property static SpecialRuleRef* get_WordSequence();
JScript    public static function get WordSequence() : SpecialRuleRef
```

Property Value

System.Speech.Srgs.SpecialRuleRef.

This property is read-only.

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SrgsGrammar Class

Note: This documentation is preliminary and is subject to change.

Represents the logical housing for individual rules and dictation grammars.

Definition

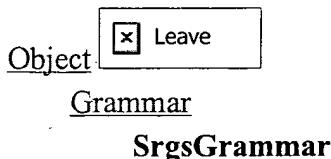
Visual Basic Public Class **SrgsGrammar**

Inherits *Grammar*

C# public class SrgsGrammar : *Grammar*
Managed C++ public __gc class SrgsGrammar : public *Grammar*
 JScript public class SrgsGrammar extends *Grammar*

Members Table

Inheritance Hierarchy



Class Information

Namespace System.Speech.Srgs
Assembly System.Speech (system.speech.dll)
Strong Name System.Speech, Version=6.0.4044.0, Culture=neutral,
 PublicKeyToken=365143bb27e7ac8b

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Commit Method

Note: This documentation is preliminary and is subject to change.

Commits any changes to this SrgsGrammar class instance to the underlying Recognizer.

Definition

Visual Basic Public Sub Commit()
 C# public void Commit();
Managed C++ public: void Commit();
 JScript public function Commit() : void;

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GetXml Method

Note: This documentation is preliminary and is subject to change.

Gets the markup representing this SrgsGrammar class instance.

Definition

```
Visual Basic Public Function GetXml() As String
C#     public string GetXml();
Managed C++ public: String* GetXml();
JScript    public function GetXml() : String;
```

Return Value

System.String.

Returns the markup representing the SrgsGrammar class instance.

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Initialize Method

Note: This documentation is preliminary and is subject to change.

Initializes an SrgsGrammar object from an input/output stream.

Definition

```
Visual Basic Public Sub Initialize(
    ByVal stream As Stream _
)
public void Initialize(
    Stream stream
);
public: void Initialize(
    Stream* stream
);
public function Initialize(
    stream : Stream
) : void;
```

Parameters

stream **System.IO.Stream.** Stream from which to load and initialize the SrgsGrammar object.

Remarks

The grammar must be loaded into the recognizer by calling SrgsGrammar::Commit();

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Load Method

Note: This documentation is preliminary and is subject to change.

Loads an SrgsGrammar class instance from an input/output stream and optionally initializes its members.

Overload List

```
public Void Load (Stream, Boolean)  
public Void Load (String, Boolean)  
public Void Load (Stream)  
public Void Load (String)
```

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Save Method

Note: This documentation is preliminary and is subject to change.

Saves an SrgsGrammar class instance to the specified universal resource identifier (URI).

Overload List

```
public Void Save (String)  
public Void Save (Stream)
```

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SrgsGrammar Method

Note: This documentation is preliminary and is subject to change.

Creates a new SrgsGrammar class instance.

Overload List

```
public SrgsGrammar()  
public SrgsGrammar(String)  
public SrgsGrammar(IRecognizer)
```

Remarks

The SrgsGrammar object is assigned to the default GrammarGroup for the specified Recognizer.

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ToString Method

Note: This documentation is preliminary and is subject to change.

Definition

Visual Basic Overrides Public Function **ToString()** As **String**
C# public override **string ToString();**
Managed C++ public: **String* ToString();**
JScript public override function **ToString()** : **String**;

Return Value

System.String.

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Language Property

Note: This documentation is preliminary and is subject to change.

Gets and sets the language of the SrgsGrammar class instance(xml:lang).

Definition

Visual Basic Public Property **Language** As **CultureInfo Class**
C# public **CultureInfo Class** **Language** { get; set; }
Managed C++ public: **property CultureInfo Class* get_Language();**
public: **property void set_Language(CultureInfo Class*);**
JScript public function **get Language()** : **CultureInfo Class**
public function **set Language(CultureInfo Class)**;

Property Value

System.Globalization.CultureInfo.

This property is read/write.

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Mode Property

Note: This documentation is preliminary and is subject to change.

Gets and sets the SrgsGrammar grammar mode as either Voice or dual tone, multi-frequency (DTMF).

Definition

Visual Basic Public Property Mode As GrammarMode

C# public GrammarMode Mode { get; set; }

Managed C++ public: __property GrammarMode get_Mode();
public: __property void set_Mode(GrammarMode);

JScript public function get Mode() : GrammarMode
 public function set Mode(GrammarMode);

Property Value

System.Speech.Srgs.GrammarMode.

This property is read/write.

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Root Property

Note: This documentation is preliminary and is subject to change.

Gets and sets the root rule of the SrgsGrammar class instance (srgs:root).

Definition

Visual Basic Public Property Root As Rule

C# public Rule Root { get; set; }

Managed C++ public: __property Rule* get_Root();
public: __property void set_Root(Rule*);

JScript public function get **Root()** : **Rule**
 public function set **Root(Rule)**;

Property Value

System.Speech.Srgs.Rule.

This property is read/write.

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Rules Property

Note: This documentation is preliminary and is subject to change.

Gets the collection of rules that this SrgsGrammar class instance contains.

Definition

Visual Basic Public ReadOnly Property **Rules** As **RuleCollection**

 C# public **RuleCollection** **Rules** { get; }

Managed C++ public: **property RuleCollection* get_Rules();**

JScript public function get **Rules()** : **RuleCollection**

Property Value

System.Speech.Srgs.RuleCollection.

This property is read-only.

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TagFormat Property

Note: This documentation is preliminary and is subject to change.

Gets and sets the format of the SrgsGrammar class instance Tag class instance (srgs:tag-format).

Definition

Visual Basic Public Property **TagFormat** As **TagFormat**

 C# public **TagFormat** **TagFormat** { get; set; }

Managed C++ public: __property **TagFormat** get_TagFormat();
public: __property void set_TagFormat(**TagFormat**);

JScript public function get TagFormat() : **TagFormat**
public function set TagFormat(**TagFormat**);

Property Value

System.Speech.Srgs.TagFormat.

This property is read/write.

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XmlBase Property

Note: This documentation is preliminary and is subject to change.

Gets and sets the base universal resource identifier (URI) of the SrgsGrammar class instance (xml:base).

Definition

Visual Basic Public Property **XmlBase** As **String**

C# public **string** **XmlBase** { get; set; }

Managed C++ public: __property **String*** get_XmlBase();
public: __property void set_XmlBase(**String***);

JScript public function get **XmlBase()** : **String**
public function set **XmlBase(**String**)**;

Property Value

System.String.

This property is read/write.

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SrgsText Class

Note: This documentation is preliminary and is subject to change.

Represents text content in Speech Recognition Grammar Specification (SRGS) markup.

Definition

Visual Basic Public Class **SrgsText**
 Inherits Object
 Implements IItemElement, IRuleElement

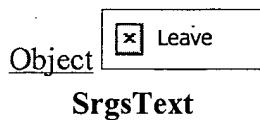
C# public class **SrgsText** : Object,
IItemElement, IRuleElement

Managed C++ public __gc class **SrgsText** : public Object,
IItemElement, IRuleElement

JScript public class **SrgsText** extends Object
 implements IRuleElement, IItemElement

Members Table

Inheritance Hierarchy



Class Information

Namespace System.Speech.Srgs
Assembly System.Speech (system.speech.dll)
Strong Name System.Speech, Version=6.0.4044.0, Culture=neutral,
 PublicKeyToken=365143bb27e7ac8b

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SrgsText Method

Note: This documentation is preliminary and is subject to change.

Initializes a new instance of the SrgsText class.

Overload List

```

public SrgsText()
public SrgsText(String)
  
```

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Text Property

Note: This documentation is preliminary and is subject to change.

Gets and sets the text of the SrgsText class instance.

Definition

Visual Basic Public Property **Text** As String

C# public string **Text** { get; set; }

Managed C++ public: __property String* **get_Text()**;
public: __property void **set_Text(String*)**;

JScript public function **get Text()** : String
public function **set Text(String)**;

Property Value

System.String.

This property is read/write.

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Tag Class

Note: This documentation is preliminary and is subject to change.

Represents the World Wide Web Consortium (W3C) Speech Recognition Grammar Specification (SRGS) tag element. See <http://www.w3.org/TR/speech-grammar/> for more information.

Definition

Public Class **Tag**

Visual Basic Inherits Object

Implements IItemElement, IRuleElement

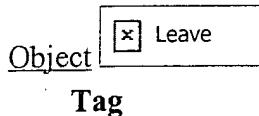
C# public class **Tag** : Object,
IItemElement, IRuleElement

Managed C++ public __gc class **Tag** : public Object,
IItemElement, IRuleElement

JScript public class **Tag** extends Object
implements IRuleElement, IItemElement

Members Table

Inheritance Hierarchy



Class Information

Namespace System.Speech.Srgs
Assembly System.Speech (system.speech.dll)
Strong Name System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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Tag Method

Note: This documentation is preliminary and is subject to change.

Initializes a new instance of the Tag class.

Overload List

```
public Tag()
public Tag (String)
```

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ToString Method

Note: This documentation is preliminary and is subject to change.

Definition

Visual Basic Overrides Public Function ToString() As String
C# public override string ToString();
Managed C++ public: String* ToString();
JScript public override function ToString(): String;

Return Value

System.String.

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Text Property

Note: This documentation is preliminary and is subject to change.

Gets and sets the text of the Tag class instance.

Definition

Visual Basic Public Property **Text** As String

C# public string **Text** { get; set; }

Managed C++ public: property String* **get_Text()**;
public: property void **set_Text(String*)**;

JScript public function **get Text()** : String
public function **set Text(String)**;

Property Value

System.String.

This property is read/write.

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Token Class

Note: This documentation is preliminary and is subject to change.

Token represents the World Wide Web Consortium (W3C) Speech Recognition Grammar Specification (SRGS) token element. See <http://www.w3.org/TR/speech-grammar/> for more information.

Definition

Public Class **Token**

Visual Basic Inherits Object

Implements IItemElement, IRuleElement

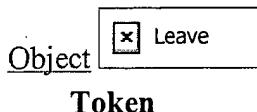
C# public class **Token** : Object,
IItemElement, IRuleElement

Managed C++ public __gc class **Token** : public Object,
IItemElement, IRuleElement

JScript public class **Token** extends Object
implements IRuleElement, IItemElement

Members Table

Inheritance Hierarchy



Remarks

Note that if multiple words are stored in a single Token, each is treated internally, and in the result, as a different token.

Class Information

Namespace System.Speech.Srgs
Assembly System.Speech (system.speech.dll)
Strong Name System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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Token Method

Note: This documentation is preliminary and is subject to change.

Initializes a new instance of the Token class.

Overload List

[public Token \(\)](#)
[public Token \(String\)](#)
[public Token \(String, String\)](#)

Remarks

Creates a Token object with properties not yet set. The text property must be set prior to committing the associated rule(s) to the Grammar.

Creates a Token object with the Text property initially set to the text param passed in.

Creates a Token class instance with the Text property initially set to the text param passed in.

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ToString Method

Note: This documentation is preliminary and is subject to change.

Definition

Visual Basic Overrides Public Function **ToString()** As **String**

C# public override **string ToString();**

Managed C++ public: **String* ToString();**

JScript public override function **ToString()** : **String**;

Return Value

System.String.

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Pronunciation Property

Note: This documentation is preliminary and is subject to change.

Gets and sets pronunciation for the token.

Definition

Visual Basic Public Property **Pronunciation** As **String**

C# public **string Pronunciation** { get; set; }

Managed C++ public: **property String* get_Pronunciation();**
public: **property void set_Pronunciation(String*);**

JScript public function **get Pronunciation()** : **String**
public function **set Pronunciation(String)**;

Property Value

System.String.

This property is read/write.

Remarks

This pronunciation is an extension to the World Wide Web Consortium (W3C) Speech

Recognition Grammar Specification (SRGS) format using the following namespace:
<http://schemas.microsoft.com/Speech/2002/06/SRGSExtensions>

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Text Property

Note: This documentation is preliminary and is subject to change.

Gets and sets the text contained within the Token class instance.

Definition

Visual Basic Public Property **Text** As String

C# public string **Text** { get; set; }

Managed C++ public: __property String* **get_Text()**;
public: __property void **set_Text(String*)**;

JScript public function **get Text()** : String
public function **set Text(String)**;

Property Value

System.String.

This property is read/write.

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IItemElement Interface

Note: This documentation is preliminary and is subject to change.

The IItemElement interface is an empty interface implemented by all Speech Recognition Grammar Specification (SRGS) elements that can be a child element of the item element. (Item, OneOf, RuleRef, SpecialRuleRef, Tag, Token, SrgsText)

Definition

Visual Basic Public Interface **IItemElement**

C# public interface **IItemElement**

Managed C++ public __gc __interface **IItemElement**

JScript public interface **IItemElement**

Interface Information

Namespace System.Speech.Srgs
Assembly System.Speech (system.speech.dll)
Strong Name System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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IRuleElement Interface

Note: This documentation is preliminary and is subject to change.

The IRuleElement interface is an empty interface implemented by all Speech Recognition Grammar Specification (SRGS) elements that can be a child element of the Rule element. (Example, Item, OneOf, RuleRef, SpecialRuleRef, Tag, Token, SrgsText)

Definition

Visual Basic Public Interface **IRuleElement**
C# public interface **IRuleElement**
Managed C++ public __gc __interface **IRuleElement**
JScript public interface **IRuleElement**

Interface Information

Namespace System.Speech.Srgs
Assembly System.Speech (system.speech.dll)
Strong Name System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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GrammarMode Enumeration

Note: This documentation is preliminary and is subject to change.

Identifies the grammar mode as either Voice or dual tone, multi-frequency (DTMF).

Definition

Visual Basic Public Enum **GrammarMode**

```

C#      public enum GrammarMode
Managed C++ __value public enum GrammarMode
JScript   public enum GrammarMode

```

Constants

Constant Name	Description
Voice	Specifies voice grammar mode.
Dtmf	Specifies dual tone, multi-frequency (DTMF) grammar mode.

Enumeration Information

Namespace System.Speech.Srgs
Assembly System.Speech (system.speech.dll)
Strong Name System.Speech, Version=6.0.4044.0, Culture=neutral,
 PublicKeyToken=365143bb27e7ac8b

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RuleScope Enumeration

Note: This documentation is preliminary and is subject to change.

RuleScope specifies how a rule behaves. The behavior includes whether or not it can be referenced by other rules and whether or not the rule can be activated.

Definition

```

Visual Basic Public Enum RuleScope
C#      public enum RuleScope
Managed C++ __value public enum RuleScope
JScript   public enum RuleScope

```

Constants

Constant Name	Description
Public	Specifies a Public Rule. Rules identified as Public can be both activated as well as referenced by rules in other grammars
Private	Specifies a Private rule. Rules identified as Private cannot be activated, but they can be referenced by rules in the same grammar

Enumeration Information

Namespace System.Speech.Srgs
Assembly System.Speech (system.speech.dll)
Strong Name System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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SpecialRuleRefType Enumeration

Note: This documentation is preliminary and is subject to change.

Special rule references allow grammars based on context-free grammars (CFG) to have powerful additional features, such as transitions into dictation (both recognized or not recognized) and word sequences from SAPI 5.0.

Definition

Visual Basic Public Enum SpecialRuleRefType
C# public enum SpecialRuleRefType
Managed C++ __value public enum SpecialRuleRefType
JScript public enum SpecialRuleRefType

Constants

Constant Name	Description
Null	Specifies a rule that is automatically matched, that is, matched without the user speaking any word.
Void	Specifies a rule that can never be spoken. Inserting Void into a sequence automatically makes that sequence unspeakable.
Garbage	Specifies a rule that may match any speech up until the next rule match, the next token, or until the end of spoken input. Designed for applications that would like to recognize some phrases without failing due to irrelevant, or ignorable words.
WordSequence	Specifies a rule that may match recognized speech from an associated text buffer, or word sequence, on the containing Grammar object.

Enumeration Information

Namespace System.Speech.Srgs
Assembly System.Speech (system.speech.dll)
Strong Name System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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TagFormat Structure

Note: This documentation is preliminary and is subject to change.

TagFormat extensible enumeration.

Definition

Visual Basic Public Structure TagFormat

C# public struct TagFormat

Managed C++ public __value struct TagFormat

JScript In JScript, you can use structures, but you cannot define your own.

Members Table

Structure Information

Namespace System.Speech.Srgs

Assembly System.Speech (system.speech.dll)

Strong System.Speech, Version=6.0.4044.0, Culture=neutral,

Name PublicKeyToken=365143bb27e7ac8b

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Equals Method

Note: This documentation is preliminary and is subject to change.

Compares the TagFormat class instance against another object.

Overload List

public override Boolean Equals (Object)

public override Boolean Equals (TagFormat)

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GetHashCode Method

Note: This documentation is preliminary and is subject to change.

Creates a hash code from the TagFormat class instance string.

Definition

Visual Basic Overrides Public Function **GetHashCode()** As Integer

C# public override int **GetHashCode()**;

Managed C++ public: int **GetHashCode()**;

JScript public override function **GetHashCode()** : int;

Return Value

System.Int32.

Returns the hash value of the TagFormat class instance.

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op_Equality Method

Note: This documentation is preliminary and is subject to change.

TagFormat class equality comparison operator.

Definition

Visual Basic Public Shared Function **op_Equality(**
 ByVal a As TagFormat,
 ByVal b As TagFormat
) As Boolean

C# public static bool **op_Equality(**
 TagFormat **a,**
 TagFormat **b**
);

Managed C++ public: static bool **op_Equality(**
 TagFormat **a,**
 TagFormat **b**
);

JScript public static function **op_Equality(**
 [a : TagFormat](#),
 [b : TagFormat](#)
) : boolean;

Parameters

- a* **System.Speech.Srgs.TagFormat**. First TagFormat class instance being compared.
- b* **System.Speech.Srgs.TagFormat**. Second TagFormat class instance being compared.

Return Value

System.Boolean.

None.

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op_Inequality Method

Note: This documentation is preliminary and is subject to change.

TagFormat class inequality comparison operator.

Definition

```
Public Shared Function op_Inequality( _
  ByVal a As TagFormat, _
  ByVal b As TagFormat _
) As Boolean
public static bool op_Inequality(
  TagFormat a,
  TagFormat b
);
public: static bool op_Inequality(
  TagFormat a,
  TagFormat b
);
public static function op_Inequality(
  a : TagFormat,
  b : TagFormat
) : boolean;
```

Parameters

- a* **System.Speech.Srgs.TagFormat**. First TagFormat class instance being compared.
- b* **System.Speech.Srgs.TagFormat**. Second TagFormat class instance being compared.

Return Value

System.Boolean.

None.

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TagFormat Method

Note: This documentation is preliminary and is subject to change.

Initializes a new instance of the TagFormat class.

Definition

```
Visual Basic  Public Sub TagFormat(  
                  ByVal tagFormat As String  
                  )  
C#          public TagFormat(  
                  string tagFormat  
                  );  
Managed C++ public: TagFormat(  
                  String* tagFormat  
                  );  
JScript     public function TagFormat(  
                  tagFormat : String  
                  );
```

Parameters

tagFormat **System.String.** Format of the new TagFormat class instance.

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ToString Method

Note: This documentation is preliminary and is subject to change.

Creates a string representation of this TagFormat class instance.

Definition

```
Visual Basic Overrides Public Function ToString() As String  
C#          public override string ToString();
```

Managed C++ public: String* **ToString()**;
JScript public override function **ToString()** : String;

Return Value

System.String.

Returns the string representation of the TagFormat class instance.

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DefaultSemantics Property

Note: This documentation is preliminary and is subject to change.

Default tag format

Definition

Visual Basic Public Shared ReadOnly Property **DefaultSemantics** As TagFormat
C# public static TagFormat **DefaultSemantics** { get; }
Managed C++ public: __property static TagFormat get_**DefaultSemantics()**;
JScript public static function **get DefaultSemantics()** : TagFormat

Property Value

System.Speech.Srgs.TagFormat.

This property is read-only.

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MSSapiProperties Property

Note: This documentation is preliminary and is subject to change.

Sets the tag format to those described by the Microsoft Speech Applications Programming Interface (MS SAPI) Properties 1.0.

Definition

Visual Basic Public Shared ReadOnly Property **MSSapiProperties** As TagFormat

```
C#     public static TagFormat MSSapiProperties { get; }  
Managed C++ public: __property static TagFormat get_MSSapiProperties();  
JScript     public static function get MSSapiProperties() : TagFormat
```

Property Value

System.Speech.Srgs.TagFormat.

This property is read-only.

Examples

The following code specifies tag format to be as described by MS SAPI properties.

```
// - Add the rule to the grammar and set it as the Root rule.ChangeColorGrammar  
' - Add the rule to the grammar and set it as the Root rule.ChangeColorGrammar.
```

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MSSemanticInterpretation Property

Note: This documentation is preliminary and is subject to change.

Sets the tag format to those described by the Microsoft Semantic Interpretation 1.0.

Definition

```
Visual Basic Public Shared ReadOnly Property MSSemanticInterpretation As TagFormat  
C#     public static TagFormat MSSemanticInterpretation { get; }  
Managed C++ public: __property static TagFormat get_MSSemanticInterpretation();  
JScript     public static function get MSSemanticInterpretation() : TagFormat
```

Property Value

System.Speech.Srgs.TagFormat.

This property is read-only.

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System.Speech.Synthesis

Note: This documentation is preliminary and is subject to change.

The following tables list the members exposed by the System.Speech.Synthesis namespace.

Classes

<u>AudioLevelChangedEventArgs</u>	Provides data for the AudioLevelChanged event.
<u>BookmarkDetectedEventArgs</u>	Error handler
<u>SpeakCompletedEventArgs</u>	[To be provided]
<u>SpeakProgressChangedEventArgs</u>	[To be supplied.]
<u>SpeakToken</u>	Represents a single speak operation.
<u>SpeechSynthesizer</u>	[To be supplied.]
<u>SynthesisEventArgs</u>	Event handler for SpeakStarting and future events. Base class for all Speech Synthesis events.
<u>SynthesizePhonemeEventArgs</u>	[To be supplied.]
<u>SynthesizeVisemeEventArgs</u>	[To be supplied.]
<u>Voice</u>	[To be supplied.]
<u>VoiceAttributes</u>	Represents the attributes of the text-to-speech (TTS) voice.

Enumerations

[SpeakPriority](#) Indicates the speaking priority

[SpeechUnit](#) Specifies the unit of speech.

[VoiceGender](#) Identifies the gender of the voice used in text-to-speech synthesis.

Structures

[SpeakMediaType](#) SpeakMediaType identifies the format of the content to be spoken.

Delegates

<u>AudioLevelChangedEventHandler</u>	Represents the method that will handle the AudioLevelChanged event.
<u>BookmarkDetectedEventHandler</u>	[To be supplied.]
<u>SpeakCompletedEventHandler</u>	[To be supplied.]
<u>SpeakProgressChangedEventHandler</u>	[To be supplied.]
<u>SynthesisEventHandler</u>	[To be supplied.]
<u>SynthesizePhonemeEventHandler</u>	[To be supplied.]
<u>SynthesizeVisemeEventHandler</u>	[To be supplied.]

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AudioLevelChangedEventArgs Class

Note: This documentation is preliminary and is subject to change.

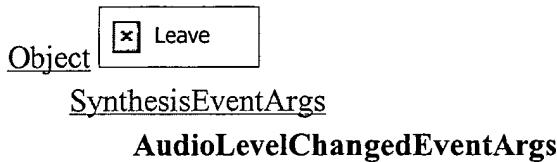
Provides data for the AudioLevelChanged event.

Definition

Visual	Public Class AudioLevelChangedEventArgs
Basic	Inherits <i>SynthesisEventArgs</i>
C#	public class AudioLevelChangedEventArgs : <i>SynthesisEventArgs</i>
Managed	public __gc
C++	class AudioLevelChangedEventArgs : public <i>SynthesisEventArgs</i>
JScript	public class AudioLevelChangedEventArgs extends <i>SynthesisEventArgs</i>

Members Table

Inheritance Hierarchy



Class Information

Namespace	System.Speech.Synthesis
Assembly	System.Speech (system.speech.dll)
Strong Name	System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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AudioLevelChangedEventArgs Method

Note: This documentation is preliminary and is subject to change.

Sets the audio level for the specified speak operation.

Definition

```

Visual Basic  Public Sub AudioLevelChangedEventArgs(_
  ByVal speakToken As SpeakToken, _
  ByVal audioPosition As TimeSpan, _
  ByVal audioLevel As Integer _
)
C#    public AudioLevelChangedEventArgs(_
  SpeakToken speakToken,
  TimeSpan audioPosition,
  int audioLevel
);
Managed C++ public: AudioLevelChangedEventArgs(_
  SpeakToken* speakToken,
  TimeSpan audioPosition,
  int audioLevel
);
JScript   public function AudioLevelChangedEventArgs(_
  speakToken : SpeakToken,
  audioPosition : TimeSpan,
  audioLevel : int
);

```

Parameters

speakToken **System.Speech.Synthesis.SpeakToken**.
audioPosition **System.TimeSpan**.
audioLevel **System.Int32**.

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AudioLevel Property

Note: This documentation is preliminary and is subject to change.

Gets the audio level.

Definition

```

Visual Basic  Public ReadOnly Property AudioLevel As Integer
C#    public int AudioLevel { get; }
Managed C++ public: __property int get_AudioLevel();
JScript   public function get AudioLevel() : int

```

Property Value

System.Int32.

This property is read-only.

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BookmarkDetectedEventArgs Class

Note: This documentation is preliminary and is subject to change.

Error handler

Definition

Visual Basic Public Class **BookmarkDetectedEventArgs**
 Inherits *SynthesisEventArgs*

C# public class **BookmarkDetectedEventArgs** : *SynthesisEventArgs*

Managed public __gc
 class **BookmarkDetectedEventArgs** : public *SynthesisEventArgs*

C++ class **BookmarkDetectedEventArgs** : public *SynthesisEventArgs*

JScript public class **BookmarkDetectedEventArgs** extends *SynthesisEventArgs*

Members Table

Inheritance Hierarchy



Class Information

Namespace System.Speech.Synthesis
Assembly System.Speech (system.speech.dll)
Strong Name System.Speech, Version=6.0.4044.0, Culture=neutral,
 PublicKeyToken=365143bb27e7ac8b

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BookmarkDetectedEventArgs Method

Note: This documentation is preliminary and is subject to change.

[To be supplied.]

Definition

```

Visual Basic  Public Sub BookmarkDetectedEventArgs(_
  ByVal speakToken As SpeakToken, _
  ByVal audioPosition As TimeSpan, _
  ByVal bookmarkName As String _
)
C#        public BookmarkDetectedEventArgs(_
  SpeakToken speakToken,
  TimeSpan audioPosition,
  string bookmarkName
);
Managed C++ public: BookmarkDetectedEventArgs(_
  SpeakToken* speakToken,
  TimeSpan audioPosition,
  String* bookmarkName
);
JScript    public function BookmarkDetectedEventArgs(_
  speakToken : SpeakToken,
  audioPosition : TimeSpan,
  bookmarkName : String
);

```

Parameters

speakToken **System.Speech.Synthesis.SpeakToken**.
audioPosition **System.TimeSpan**.
bookmarkName **System.String**.

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BookmarkName Property

Note: This documentation is preliminary and is subject to change.

Gets the name of the Bookmark.

Definition

```

Visual Basic  Public ReadOnly Property BookmarkName As String
C#        public string BookmarkName { get; }
Managed C++ public: property String* get_BookmarkName();
JScript    public function get BookmarkName() : String

```

Property Value

System.String.

This property is read-only.

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SpeakCompletedEventArgs Class

Note: This documentation is preliminary and is subject to change.

[To be provided]

Definition

```
Public Class SpeakCompletedEventArgs
  Inherits err! bad xref:
frlrfSystemComponentModelAsyncCompletedEventArgsClassTopic; lookup
failure; no href; no caption;
  public class SpeakCompletedEventArgs : err! bad xref:
frlrfSystemComponentModelAsyncCompletedEventArgsClassTopic; lookup
failure; no href; no caption;
  public __gc class SpeakCompletedEventArgs : public err! bad xref:
frlrfSystemComponentModelAsyncCompletedEventArgsClassTopic; lookup
failure; no href; no caption;
  public class SpeakCompletedEventArgs extends err! bad xref:
frlrfSystemComponentModelAsyncCompletedEventArgsClassTopic; lookup
failure; no href; no caption;
```

Members Table

Inheritance Hierarchy

```
err! bad xref: frlrfSystemComponentModelAsyncCompletedEventArgsClassTopic;
lookup failure; no href; no caption;
  SpeakCompletedEventArgs
```

Class Information

Namespace	System.Speech.Synthesis
Assembly	System.Speech (system.speech.dll)
Strong Name	System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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SpeakCompletedEventArgs Method

Note: This documentation is preliminary and is subject to change.

Event handler that is invoked when a Speak method has concluded.

Definition

```
Public Sub SpeakCompletedEventArgs( _  
    ByVal error As Exception, _  
    ByVal canceled As Boolean, _  
    ByVal speakToken As SpeakToken _  
)  
    public SpeakCompletedEventArgs(  
        Exception error,  
        bool canceled,  
        SpeakToken speakToken  
    );  
    public: SpeakCompletedEventArgs(  
        Exception* error,  
        bool canceled,  
        SpeakToken* speakToken  
    );  
    public function SpeakCompletedEventArgs(  
        error : Exception,  
        canceled : boolean,  
        speakToken : SpeakToken  
    );
```

Parameters

error **System.Exception**.
canceled **System.Boolean**.
speakToken **System.Speech.Synthesis.SpeakToken**.

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SpeakToken Property

Note: This documentation is preliminary and is subject to change.

[To be supplied.]

Definition

Visual Basic Public ReadOnly Property **SpeakToken** As **SpeakToken**
C# public **SpeakToken** SpeakToken { get; }
Managed C++ public: __property **SpeakToken*** get_SpeakToken();
JScript public function get SpeakToken() : **SpeakToken**

Property Value

System.Speech.Synthesis.SpeakToken.

This property is read-only.

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SpeakProgressChangedEventArgs Class

Note: This documentation is preliminary and is subject to change.

[To be supplied.]

Definition

Visual Basic Public Class **SpeakProgressChangedEventArgs**
Inherits **SynthesisEventArgs**
C# public class **SpeakProgressChangedEventArgs** : **SynthesisEventArgs**
Managed public __gc
C++ class **SpeakProgressChangedEventArgs** : public **SynthesisEventArgs**
JScript public class **SpeakProgressChangedEventArgs** extends **SynthesisEventArgs**

Members Table

Inheritance Hierarchy



Class Information

Namespace System.Speech.Synthesis
Assembly System.Speech (system.speech.dll)
Strong Name System.Speech, Version=6.0.4044.0, Culture=neutral,
PublicKeyToken=365143bb27e7ac8b

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SpeakProgressChangedEventArgs Method

Note: This documentation is preliminary and is subject to change.

Event handler that is invoked when a Speak method is in progress.

Definition

```
Visual Basic   Public Sub SpeakProgressChangedEventArgs( _
                  ByVal speakToken As SpeakToken, _
                  ByVal audioPosition As TimeSpan, _
                  ByVal characterPosition As Integer _
)
public SpeakProgressChangedEventArgs(
    SpeakToken speakToken,
    TimeSpan audioPosition,
    int characterPosition
);
public: SpeakProgressChangedEventArgs(
    SpeakToken* speakToken,
    TimeSpan audioPosition,
    int characterPosition
);
public function SpeakProgressChangedEventArgs(
    speakToken : SpeakToken,
    audioPosition : TimeSpan,
    characterPosition : int
);
```

C#

```
Managed C++
```

JScript

Parameters

<i>speakToken</i>	System.Speech.Synthesis.SpeakToken.
<i>audioPosition</i>	System.TimeSpan.
<i>characterPosition</i>	System.Int32.

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CharacterPosition Property

Note: This documentation is preliminary and is subject to change.

Gets the current character position within text where speech is being synthesized.

Definition

Visual Basic Public ReadOnly Property **CharacterPosition** As Integer
C# public int **CharacterPosition** { get; }
Managed C++ public: __property int get_**CharacterPosition**();
JScript public function get **CharacterPosition**() : int

Property Value

System.Int32.

This property is read-only.

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SpeakToken Class

Note: This documentation is preliminary and is subject to change.

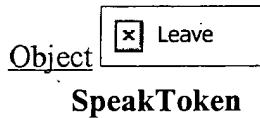
Represents a single speak operation.

Definition

Visual Basic Public Class **SpeakToken**
 Inherits Object
C# public class **SpeakToken** : Object
Managed C++ public __gc class **SpeakToken** : public Object
JScript public class **SpeakToken** extends Object

Members Table

Inheritance Hierarchy



Class Information

Namespace System.Speech.Synthesis
Assembly System.Speech (system.speech.dll)
Strong System.Speech, Version=6.0.4044.0, Culture=neutral,

Name PublicKeyToken=365143bb27e7ac8b

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Cancel Method

Note: This documentation is preliminary and is subject to change.

Cancels a speak operation asynchronously.

Definition

```
Visual Basic Public Sub Cancel()
C#     public void Cancel();
Managed C++ public: void Cancel();
JScript    public function Cancel() : void;
```

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ToString Method

Note: This documentation is preliminary and is subject to change.

Gets a string representing the content of a speak operation.

Definition

```
Visual Basic Overrides Public Function ToString() As String
C#     public override string ToString();
Managed C++ public: String* ToString();
JScript    public override function ToString() : String;
```

Return Value

System.String.

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SpeechSynthesizer Class

Note: This documentation is preliminary and is subject to change.

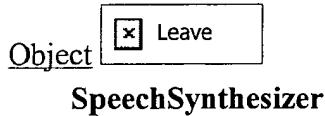
[To be supplied.]

Definition

Visual Basic	Public Class SpeechSynthesizer Inherits <u>Object</u>
C#	public class SpeechSynthesizer : <u>Object</u>
Managed C++	public __gc class SpeechSynthesizer : public <u>Object</u>
JScript	public class SpeechSynthesizer extends <u>Object</u>

Members Table

Inheritance Hierarchy



Class Information

```
Namespace System.Speech.Synthesis
Assembly System.Speech (system.speech.dll)
  Strong Name System.Speech, Version=6.0.4044.0, Culture=neutral,
  PublicKeyToken=365143bb27e7ac8b
```

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Clear Method

Note: This documentation is preliminary and is subject to change.

[To be supplied.]

Definition

Visual Basic	Public Sub Clear()
C#	public <u>void</u> Clear();
Managed C++	public: <u>void</u> Clear();
JScript	public function Clear() : <u>void</u> ;

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Dispose Method

Note: This documentation is preliminary and is subject to change.

[To be supplied.]

Overload List

```
public Void Dispose()  
public Void Dispose(Boolean)
```

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Finalize Method

Note: This documentation is preliminary and is subject to change.

[To be supplied.]

Definition

```
Visual Basic Overrides Protected Sub Finalize()  
C# ~SpeechSynthesizer();  
Managed C++ ~SpeechSynthesizer();  
JScript protected override function Finalize() : void;
```

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Pause Method

Note: This documentation is preliminary and is subject to change.

[To be supplied.]

Definition

```
Visual Basic Public Sub Pause()  
C# public void Pause();  
Managed C++ public: void Pause();  
JScript public function Pause() : void;
```

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Resume Method

Note: This documentation is preliminary and is subject to change.

[To be supplied.]

Definition

```
Visual Basic Public Sub Resume()
C#     public void Resume();
Managed C++ public: void Resume();
JScript   public function Resume(): void;
```

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Skip Method

Note: This documentation is preliminary and is subject to change.

[To be supplied.]

Definition

```
Visual Basic Public Function Skip(
    ByVal count As Integer,
    ByVal unit As SpeechUnit
) As Integer
C#     public int Skip(
        int count,
        SpeechUnit unit
    );
    public: int Skip(
        int count,
        SpeechUnit unit
    );
Managed C++ public function Skip(
    int count,
    SpeechUnit unit
);
JScript   count : int,
          unit : SpeechUnit
) : int;
```

Parameters

count System.Int32.
unit System.Speech.Synthesis.SpeechUnit.

Return Value

System.Int32.

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SpeechSynthesizer Method

Note: This documentation is preliminary and is subject to change.

[To be supplied.]

Definition

Visual Basic Public Sub SpeechSynthesizer()
C# public SpeechSynthesizer();
Managed C++ public: SpeechSynthesizer();
JScript public function SpeechSynthesizer();

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CurrentToken Property

Note: This documentation is preliminary and is subject to change.

[To be supplied.]

Definition

Visual Basic Public ReadOnly Property CurrentToken As SpeakToken
C# public SpeakToken CurrentToken { get; }
Managed C++ public: __property SpeakToken* get_CurrentToken();
JScript public function get CurrentToken() : SpeakToken

Property Value

System.Speech.Synthesis.SpeakToken.

This property is read-only.

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RateMultiplier Property

Note: This documentation is preliminary and is subject to change.

[To be supplied.]

Definition

Visual Basic Public Property **RateMultiplier** As Single

C# public float **RateMultiplier** { get; set; }

Managed C++ public: __property float get_**RateMultiplier**();
public: __property void set_**RateMultiplier**(float);

JScript public function get **RateMultiplier**() : float
public function set **RateMultiplier**(float);

Property Value

System.Single.

This property is read/write.

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SystemSynthesizer Property

Note: This documentation is preliminary and is subject to change.

[To be supplied.]

Definition

Visual Basic Public Shared ReadOnly Property **SystemSynthesizer** As SpeechSynthesizer

C# public static SpeechSynthesizer **SystemSynthesizer** { get; }

Managed C++ public: __property static SpeechSynthesizer* get_**SystemSynthesizer**();

JScript public static function get **SystemSynthesizer**() : SpeechSynthesizer

Property Value

System.Speech.Synthesis.SpeechSynthesizer.

This property is read-only.

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VolumeMultiplier Property

Note: This documentation is preliminary and is subject to change.

[To be supplied.]

Definition

Visual Basic Public Property VolumeMultiplier As Single
C# public float VolumeMultiplier { get; set; }
Managed C++ public: __property float get_VolumeMultiplier();
 public: __property void set_VolumeMultiplier(float);
JScript public function get VolumeMultiplier() : float
 public function set VolumeMultiplier(float);

Property Value

System.Single.

This property is read/write.

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AudioLevelChanged Event

Note: This documentation is preliminary and is subject to change.

[To be supplied.]

Definition

Visual Basic Public Event AudioLevelChanged As AudioLevelChangedEventHandler
C# public event AudioLevelChangedEventHandler AudioLevelChanged;
Managed C++ public: __event AudioLevelChanged;
JScript In JScript, you can use events, but you cannot define your own.

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SynthesizePhoneme Event

Note: This documentation is preliminary and is subject to change.

[To be supplied.]

Definition

Visual Basic Public Event **SynthesizePhoneme** As *SynthesizePhonemeEventHandler*
C# public event *SynthesizePhonemeEventHandler* **SynthesizePhoneme**;
Managed C++ public: __event **SynthesizePhoneme**;
JScript In JScript, you can use events, but you cannot define your own.

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SynthesizeViseme Event

Note: This documentation is preliminary and is subject to change.

[To be supplied.]

Definition

Visual Basic Public Event **SynthesizeViseme** As *SynthesizeVisemeEventHandler*
C# public event *SynthesizeVisemeEventHandler* **SynthesizeViseme**;
Managed C++ public: __event **SynthesizeViseme**;
JScript In JScript, you can use events, but you cannot define your own.

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SynthesisEventArgs Class

Note: This documentation is preliminary and is subject to change.

Event handler for SpeakStarting and future events. Base class for all Speech Synthesis events.

Definition

Visual Basic Public Class **SynthesisEventArgs**
 Inherits Object

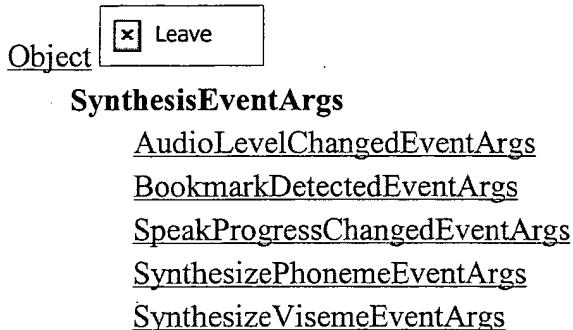
C# public class **SynthesisEventArgs** : Object

Managed C++ public __gc class **SynthesisEventArgs** : public Object

JScript public class **SynthesisEventArgs** extends Object

Members Table

Inheritance Hierarchy



Class Information

Namespace System.Speech.Synthesis
Assembly System.Speech (system.speech.dll)
Strong Name System.Speech, Version=6.0.4044.0, Culture=neutral,
PublicKeyToken=365143bb27e7ac8b

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SynthesisEventArgs Method

Note: This documentation is preliminary and is subject to change.

Event handler for speech synthesis events.

Definition

Visual Basic Public Sub **SynthesisEventArgs**(
 ByVal *speakToken* As SpeakToken,
 ByVal *audioPosition* As TimeSpan _
)
C# public **SynthesisEventArgs**(
SpeakToken *speakToken*,
TimeSpan *audioPosition*
);

```
public: SynthesisEventArgs(  
Managed C++     SpeakToken* speakToken,  
                      TimeSpan audioPosition  
);  
public function SynthesisEventArgs(  
JScript      speakToken : SpeakToken,  
                      audioPosition : TimeSpan  
);
```

Parameters

speakToken `System.Speech.Synthesis.SpeakToken`.
audioPosition `System.TimeSpan`.

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AudioPosition Property

Note: This documentation is preliminary and is subject to change.

Gets the position within the spoken text at which the synthesis event occurred.

Definition

Visual Basic Public ReadOnly Property **AudioPosition** As `TimeSpan`
C# public `TimeSpan` **AudioPosition** { get; }
Managed C++ public: __property `TimeSpan` get_**AudioPosition**();
JScript public function get **AudioPosition**() : `TimeSpan`

Property Value

`System.TimeSpan`.

This property is read-only.

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SpeakToken Property

Note: This documentation is preliminary and is subject to change.

Gets the identity of the Speak method call that raised the synthesis event.

Definition

Visual Basic Public ReadOnly Property SpeakToken As SpeakToken
C# public SpeakToken SpeakToken { get; }
Managed C++ public: __property SpeakToken* get_SpeakToken();
JScript public function get SpeakToken() : SpeakToken

Property Value

System.Speech.Synthesis.SpeakToken.

This property is read-only.

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SynthesizePhonemeEventArgs Class

Note: This documentation is preliminary and is subject to change.

[To be supplied.]

Definition

Visual Basic Public Class SynthesizePhonemeEventArgs
Inherits SynthesisEventArgs
C# public class SynthesizePhonemeEventArgs : SynthesisEventArgs
Managed public __gc
C++ class SynthesizePhonemeEventArgs : public SynthesisEventArgs
JScript public class SynthesizePhonemeEventArgs extends SynthesisEventArgs

Members Table

Inheritance Hierarchy



Class Information

Namespace System.Speech.Synthesis
Assembly System.Speech (system.speech.dll)
Strong System.Speech, Version=6.0.4044.0, Culture=neutral,

Name PublicKeyToken=365143bb27e7ac8b

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SynthesizePhonemeEventArgs Method

Note: This documentation is preliminary and is subject to change.

[To be supplied.]

Definition

Visual Basic

```
Public Sub SynthesizePhonemeEventArgs( _
    ByVal speakToken As SpeakToken, _
    ByVal audioPosition As TimeSpan, _
    ByVal currentPhoneme As Integer, _
    ByVal duration As TimeSpan, _
    ByVal features As Integer, _
    ByVal nextPhoneme As Integer _
)
    public SynthesizePhonemeEventArgs(
        SpeakToken speakToken,
        TimeSpan audioPosition,
        int currentPhoneme,
        TimeSpan duration,
        int features,
        int nextPhoneme
    );
    public: SynthesizePhonemeEventArgs(
        SpeakToken* speakToken,
        TimeSpan audioPosition,
        int currentPhoneme,
        TimeSpan duration,
        int features,
        int nextPhoneme
    );
    public function SynthesizePhonemeEventArgs(
        speakToken : SpeakToken,
        audioPosition : TimeSpan,
        currentPhoneme : int,
        duration : TimeSpan,
        features : int,
        nextPhoneme : int
    );

```

C#

```
public SynthesizePhonemeEventArgs(
    SpeakToken speakToken,
    TimeSpan audioPosition,
    int currentPhoneme,
    TimeSpan duration,
    int features,
    int nextPhoneme
);
public: SynthesizePhonemeEventArgs(
    SpeakToken* speakToken,
    TimeSpan audioPosition,
    int currentPhoneme,
    TimeSpan duration,
    int features,
    int nextPhoneme
);
public function SynthesizePhonemeEventArgs(
    speakToken : SpeakToken,
    audioPosition : TimeSpan,
    currentPhoneme : int,
    duration : TimeSpan,
    features : int,
    nextPhoneme : int
);

```

Managed C++

```
public SynthesizePhonemeEventArgs(
    SpeakToken* speakToken,
    TimeSpan audioPosition,
    int currentPhoneme,
    TimeSpan duration,
    int features,
    int nextPhoneme
);
public: SynthesizePhonemeEventArgs(
    SpeakToken* speakToken,
    TimeSpan audioPosition,
    int currentPhoneme,
    TimeSpan duration,
    int features,
    int nextPhoneme
);
public function SynthesizePhonemeEventArgs(
    speakToken : SpeakToken,
    audioPosition : TimeSpan,
    currentPhoneme : int,
    duration : TimeSpan,
    features : int,
    nextPhoneme : int
);

```

JScript

```
public SynthesizePhonemeEventArgs(
    speakToken : SpeakToken,
    audioPosition : TimeSpan,
    currentPhoneme : int,
    duration : TimeSpan,
    features : int,
    nextPhoneme : int
);

```

Parameters

<i>speakToken</i>	System.Speech.Synthesis.SpeakToken.
<i>audioPosition</i>	System.TimeSpan.
<i>currentPhoneme</i>	System.Int32.
<i>duration</i>	System.TimeSpan.
<i>features</i>	System.Int32.
<i>nextPhoneme</i>	System.Int32.

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CurrentPhoneme Property

Note: This documentation is preliminary and is subject to change.

[To be supplied.]

Definition

Visual Basic Public ReadOnly Property **CurrentPhoneme** As **Integer**
C# public **int** **CurrentPhoneme** { **get;** }
Managed C++ public: __property **int** **get_CurrentPhoneme()**;
JScript public function **get CurrentPhoneme()** : **int**

Property Value

System.Int32.

This property is read-only.

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Duration Property

Note: This documentation is preliminary and is subject to change.

[To be supplied.]

Definition

Visual Basic Public ReadOnly Property **Duration** As **TimeSpan**
C# public **TimeSpan** **Duration** { **get;** }
Managed C++ public: __property **TimeSpan** **get_Duration()**;

JScript public function get Duration() : TimeSpan

Property Value

System.TimeSpan.

This property is read-only.

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NextPhoneme Property

Note: This documentation is preliminary and is subject to change.

[To be supplied.]

Definition

Visual Basic Public ReadOnly Property **NextPhoneme** As Integer

 C# public int **NextPhoneme** { get; }

Managed C++ public: __property int get_NextPhoneme();

JScript public function get NextPhoneme() : int

Property Value

System.Int32.

This property is read-only.

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SynthesizeVisemeEventArgs Class

Note: This documentation is preliminary and is subject to change.

[To be supplied.]

Definition

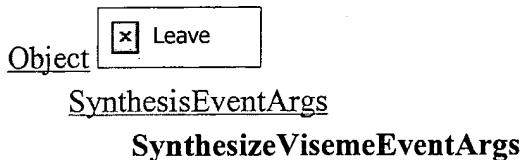
Visual Basic Public Class **SynthesizeVisemeEventArgs**
 Inherits SynthesisEventArgs

 C# public class **SynthesizeVisemeEventArgs** : SynthesisEventArgs

Managed public __gc
C++ class **SynthesizeVisemeEventArgs** : public *SynthesisEventArgs*
JScript public class **SynthesizeVisemeEventArgs** extends *SynthesisEventArgs*

Members Table

Inheritance Hierarchy



Class Information

Namespace System.Speech.Synthesis
Assembly System.Speech (system.speech.dll)
Strong Name System.Speech, Version=6.0.4044.0, Culture=neutral,
 PublicKeyToken=365143bb27e7ac8b

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SynthesizeVisemeEventArgs Method

Note: This documentation is preliminary and is subject to change.

[To be supplied.]

Definition

Visual Basic

```

Public Sub SynthesizeVisemeEventArgs( _
    ByVal speakToken As SpeakToken, _
    ByVal audioPosition As TimeSpan, _
    ByVal currentViseme As Integer, _
    ByVal duration As TimeSpan, _
    ByVal features As Integer, _
    ByVal nextViseme As Integer _
)
  
```

C#

```

public SynthesizeVisemeEventArgs(
    SpeakToken speakToken,
    TimeSpan audioPosition,
    int currentViseme,
    TimeSpan duration,
    int features,
    int nextViseme
  
```

```

);
public: SynthesizeVisemeEventArgs(
    SpeakToken* speakToken,
    TimeSpan audioPosition,
    int currentViseme,
    TimeSpan duration,
    int features,
    int nextViseme
);
public function SynthesizeVisemeEventArgs(
    speakToken : SpeakToken,
    audioPosition : TimeSpan,
    currentViseme : int,
    duration : TimeSpan,
    features : int,
    nextViseme : int
);

```

Parameters

<i>speakToken</i>	System.Speech.Synthesis.SpeakToken.
<i>audioPosition</i>	System.TimeSpan.
<i>currentViseme</i>	System.Int32.
<i>duration</i>	System.TimeSpan.
<i>features</i>	System.Int32.
<i>nextViseme</i>	System.Int32.

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CurrentViseme Property

Note: This documentation is preliminary and is subject to change.

[To be supplied.]

Definition

Visual Basic	Public ReadOnly Property CurrentViseme As Integer
C#	public int CurrentViseme { get; }
Managed C++	public: __property int get_CurrentViseme();
JScript	public function get CurrentViseme() : int

Property Value

System.Int32.

This property is read-only.

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Duration Property

Note: This documentation is preliminary and is subject to change.

[To be supplied.]

Definition

Visual Basic Public ReadOnly Property **Duration** As [TimeSpan](#)

C# public [TimeSpan](#) **Duration** { get; }

Managed C++ public: __property [TimeSpan](#) get__Duration();

JScript public function get **Duration()** : [TimeSpan](#)

Property Value

System.TimeSpan.

This property is read-only.

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NextViseme Property

Note: This documentation is preliminary and is subject to change.

[To be supplied.]

Definition

Visual Basic Public ReadOnly Property **NextViseme** As [Integer](#)

C# public [int](#) **NextViseme** { get; }

Managed C++ public: __property [int](#) get__NextViseme();

JScript public function get **NextViseme()** : [int](#)

Property Value

System.Int32.

This property is read-only.

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Voice Class

Note: This documentation is preliminary and is subject to change.

[To be supplied.]

Definition

Visual Basic Public Class **Voice**
 Inherits Object
 Implements IDisposable

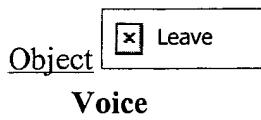
C# public class **Voice** : Object,
 IDisposable

Managed C++ public __gc class **Voice** : public Object,
 IDisposable

JScript public class **Voice** extends Object
 implements IDisposable

Members Table

Inheritance Hierarchy



Class Information

Namespace System.Speech.Synthesis
Assembly System.Speech (system.speech.dll)
Strong Name System.Speech, Version=6.0.4044.0, Culture=neutral,
 PublicKeyToken=365143bb27e7ac8b

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CancelSpeakAsync Method

Note: This documentation is preliminary and is subject to change.

[To be supplied.]

Definition

```
Visual Basic  Public Sub CancelSpeakAsync( _
                  ByVal token As SpeakToken _
                )
C#      public void CancelSpeakAsync(
                  SpeakToken token
                );
Managed C++  public: void CancelSpeakAsync(
                  SpeakToken* token
                );
JScript    public function CancelSpeakAsync(
                  token : SpeakToken
                ) : void;
```

Parameters

token System.Speech.Synthesis.SpeakToken.

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Dispose Method

Note: This documentation is preliminary and is subject to change.

[To be supplied.]

Overload List

```
public Void Dispose()
public Void Dispose (Boolean)
```

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Finalize Method

Note: This documentation is preliminary and is subject to change.

[To be supplied.]

Definition

```
Visual Basic Overrides Protected Sub Finalize()  
C#     ~Voice();  
Managed C++ ~Voice();  
JScript    protected override function Finalize() : void;
```

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Speak Method

Note: This documentation is preliminary and is subject to change.

Speaks the specified text using text-to-speech (TTS).

Overload List

```
public Void Speak (String)  
public Void Speak (String, SpeakMediaType)
```

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SpeakAsync Method

Note: This documentation is preliminary and is subject to change.

[To be supplied.]

Overload List

```
public SpeakToken SpeakAsync (String)  
public SpeakToken SpeakAsync (String, SpeakMediaType)
```

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SpeakFile Method

Note: This documentation is preliminary and is subject to change.

Speaks the contents of the specified file.

Overload List

```
public Void SpeakFile (String)  
public Void SpeakFile (String, SpeakMediaType)
```

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SpeakFileAsync Method

Note: This documentation is preliminary and is subject to change.

[To be supplied.]

Overload List

```
public SpeakToken SpeakFileAsync (String)  
public SpeakToken SpeakFileAsync (String, SpeakMediaType)
```

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Voice Method

Note: This documentation is preliminary and is subject to change.

[To be supplied.]

Overload List

```
public Voice ()  
public Voice (VoiceAttributes)  
public Voice (VoiceAttributes, SpeechSynthesizer)
```

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Attributes Property

Note: This documentation is preliminary and is subject to change.

Gets the attributes describing the characteristics of the voice.

Definition

Visual Basic Public ReadOnly Property **Attributes** As VoiceAttributes

C# public VoiceAttributes **Attributes** { get; }

Managed C++ public: __property VoiceAttributes* get_**Attributes**();

JScript public function **get Attributes()** : VoiceAttributes

Property Value

System.Speech.Synthesis.VoiceAttributes.

This property is read-only.

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Priority Property

Note: This documentation is preliminary and is subject to change.

Gets and sets the speaking priority of the text.

Definition

Visual Basic Public Property **Priority** As SpeakPriority

C# public SpeakPriority **Priority** { get; set; }

Managed C++ public: __property SpeakPriority get_**Priority**();

public: __property void set_**Priority**(SpeakPriority);

JScript public function **get Priority()** : SpeakPriority

public function **set Priority(SpeakPriority)**;

Property Value

System.Speech.Synthesis.SpeakPriority.

This property is read/write.

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Rate Property

Note: This documentation is preliminary and is subject to change.

Gets and sets the rate of speech used in text-to-speech (TTS) synthesis.

Definition

Visual Basic Public Property **Rate** As Single

C# public float **Rate** { get; set; }

Managed C++ public: property float get_Rate();
public: property void set_Rate(float);

JScript public function **get Rate()** : float
public function **set Rate(float)**;

Property Value

System.Single.

This property is read/write.

Remarks

Rate must be a floating point value greater than zero.

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Synthesizer Property

Note: This documentation is preliminary and is subject to change.

Gets and Sets the synthesizer where the voice is to be used.

Definition

Visual Basic Public Property **Synthesizer** As SpeechSynthesizer

C# public SpeechSynthesizer **Synthesizer** { get; set; }

Managed C++ public: property SpeechSynthesizer* get_Synthesizer();
public: property void set_Synthesizer(SpeechSynthesizer*);

JScript public function **get Synthesizer()** : SpeechSynthesizer
public function **set Synthesizer(SpeechSynthesizer)**;

Property Value

System.Speech.Synthesis.SpeechSynthesizer.

This property is read/write.

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Volume Property

Note: This documentation is preliminary and is subject to change.

Gets and sets the volume level of text-to-speech (TTS) synthesis.

Definition

Visual Basic Public Property **Volume** As Single

C# public float **Volume** { get; set; }

Managed C++ public: __property float get_Volume();
public: __property void set_Volume(float);

JScript public function **get Volume()** : float
public function **set Volume(float)**;

Property Value

System.Single.

This property is read/write.

Remarks

The value of Volume must be a floating point number between 0 and 100.

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BookmarkDetected Event

Note: This documentation is preliminary and is subject to change.

Occurs when a bookmark is detected.

Definition

Visual Basic Public Event **BookmarkDetected** As BookmarkDetectedEventHandler

C# public event BookmarkDetectedEventHandler **BookmarkDetected**;

Managed C++ public: __event **BookmarkDetected**;

JScript In JScript, you can use events, but you cannot define your own.

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SpeakCompleted Event

Note: This documentation is preliminary and is subject to change.

[To be supplied.]

Definition

Visual Basic Public Event **SpeakCompleted** As *SpeakCompletedEventHandler*

C# public event *SpeakCompletedEventHandler* **SpeakCompleted**;

Managed C++ public: __event **SpeakCompleted**;

JScript In JScript, you can use events, but you cannot define your own.

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SpeakProgressChanged Event

Note: This documentation is preliminary and is subject to change.

Occurs when speech in progress has changed, that is, each instance that change in speech is taking place.

Definition

Visual Basic Public

Event **SpeakProgressChanged** As *SpeakProgressChangedEventHandler*

C# public event *SpeakProgressChangedEventHandler* **SpeakProgressChanged**;

Managed C++ public: __event **SpeakProgressChanged**;

JScript In JScript, you can use events, but you cannot define your own.

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SpeakStarting Event

Note: This documentation is preliminary and is subject to change.

Event that occurs when speaking has begun.

Definition

Visual Basic Public Event **SpeakStarting** As *SynthesisEventHandler*

C# public event *SynthesisEventHandler* **SpeakStarting**;

Managed C++ public: __event **SpeakStarting**;

JScript In JScript, you can use events, but you cannot define your own.

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VoiceAttributes Class

Note: This documentation is preliminary and is subject to change.

Represents the attributes of the text-to-speech (TTS) voice.

Definition

Visual Basic Public Class **VoiceAttributes**
Inherits *Object*

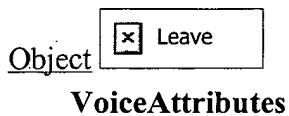
C# public class **VoiceAttributes** : *Object*

Managed C++ public __gc class **VoiceAttributes** : public *Object*

JScript public class **VoiceAttributes** extends *Object*

Members Table

Inheritance Hierarchy



Class Information

Namespace System.Speech.Synthesis

Assembly System.Speech (system.speech.dll)

Strong System.Speech, Version=6.0.4044.0, Culture=neutral,

Name PublicKeyToken=365143bb27e7ac8b

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Age Property

Note: This documentation is preliminary and is subject to change.

Gets and sets the approximate age of the voice used in text-to-speech (TTS) synthesis. Optional.

Definition

Visual Basic Public ReadOnly Property **Age** As **Integer**

C# public **int** **Age** { **get**; }

Managed C++ public: **property int** **get_Age()**;

JScript public function **get Age()** : **int**

Property Value

System.Int32.

This property is read-only.

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Gender Property

Note: This documentation is preliminary and is subject to change.

Gets and sets the gender of the voice used in text-to-speech (TTS) synthesis. Optional.

Definition

Visual Basic Public ReadOnly Property **Gender** As **VoiceGender**

C# public **VoiceGender** **Gender** { **get**; }

Managed C++ public: **property VoiceGender** **get_Gender()**;

JScript public function **get Gender()** : **VoiceGender**

Property Value

System.Speech.Synthesis.VoiceGender.

This property is read-only.

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Languages Property

Note: This documentation is preliminary and is subject to change.

Gets and sets cultural information about the voice used with text-to-speech (TTS) synthesis.

Definition

Visual Basic Public ReadOnly Property **Languages** As CultureInfo Class()

C# public CultureInfo Class[] Languages { get; }

Managed C++ public: __property CultureInfo Class* get_Languages();

JScript public function get Languages() : CultureInfo Class[]

Property Value

System.Globalization.CultureInfo.

This property is read-only.

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Name Property

Note: This documentation is preliminary and is subject to change.

Gets and sets the platform-specific voice name used in text-to-speech (TTS) synthesis. Optional.

Definition

Visual Basic Public ReadOnly Property **Name** As String

C# public string Name { get; }

Managed C++ public: __property String* get_Name();

JScript public function get Name() : String

Property Value

System.String.

This property is read-only.

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Vendor Property

Note: This documentation is preliminary and is subject to change.

Gets the name of the vendor of the voice used with text-to-speech (TTS) synthesis.

Definition

Visual Basic Public ReadOnly Property **Vendor** As **String**

C# public **string** **Vendor** { **get**; }

Managed C++ public: **__property String*** **get_Vendor()**;

JScript public function **get Vendor()** : **String**

Property Value

System.String.

This property is read-only.

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SpeakPriority Enumeration

Note: This documentation is preliminary and is subject to change.

Indicates the speaking priority

Definition

Visual Basic Public Enum **SpeakPriority**

C# public enum **SpeakPriority**

Managed C++ **__value** public enum **SpeakPriority**

JScript public enum **SpeakPriority**

Constants

Constant Name	Description
Normal	Specifies that speech has normal priority.
High	Specifies that speech has high priority.

Enumeration Information

Namespace System.Speech.Synthesis

Assembly System.Speech (system.speech.dll)

Strong Name System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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SpeechUnit Enumeration

Note: This documentation is preliminary and is subject to change.

Specifies the unit of speech.

Definition

Visual Basic Public Enum **SpeechUnit**
 C# public enum **SpeechUnit**
Managed C++ __value public enum **SpeechUnit**
JScript public enum **SpeechUnit**

Constants

Constant Name	Description
Sample	Specifies that the unit of speech is one recorded analog value in a sound file.
Phoneme	Specifies that the unit of speech is a phoneme.
Word	Specifies that the unit of speech is a word.
Sentence	Specifies that the unit of speech is a sentence.
Paragraph	Specifies that the unit of speech is a paragraph.
Document	Specifies that the unit of speech is a document.

Enumeration Information

Namespace System.Speech.Synthesis
Assembly System.Speech (system.speech.dll)
Strong Name System.Speech, Version=6.0.4044.0, Culture=neutral,
 PublicKeyToken=365143bb27e7ac8b

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VoiceGender Enumeration

Note: This documentation is preliminary and is subject to change.

Identifies the gender of the voice used in text-to-speech synthesis.

Definition

Visual Basic Public Enum VoiceGender
C# public enum VoiceGender
Managed C++ __value public enum VoiceGender
JScript public enum VoiceGender

Constants

Constant Name	Description
Neutral	Specifies that the spoken voice used for text-to-speech (TTS) synthesis is gender neutral.
Male	Specifies that the voice used for text-to-speech (TTS) synthesis is male.
Female	Specifies that the voice used for text-to-speech (TTS) synthesis is female.

Enumeration Information

Namespace System.Speech.Synthesis
Assembly System.Speech (system.speech.dll)
Strong Name System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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SpeakMediaType Structure

Note: This documentation is preliminary and is subject to change.

SpeakMediaType identifies the format of the content to be spoken.

Definition

Visual Basic Public Structure SpeakMediaType
C# public struct SpeakMediaType
Managed C++ public __value struct SpeakMediaType
JScript In JScript, you can use structures, but you cannot define your own.

Members Table

Structure Information

Namespace System.Speech.Synthesis

Assembly System.Speech (system.speech.dll)
Strong Name System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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Equals Method

Note: This documentation is preliminary and is subject to change.

Returns true if the specified object is a SpeakMediaType struct, and if it matches the media type of the current instance.

Overload List

[public override Boolean Equals \(Object\)](#)
[public override Boolean Equals \(SpeakMediaType\)](#)

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GetHashCode Method

Note: This documentation is preliminary and is subject to change.

Returns the hash code for this instance.

Definition

Visual Basic Overrides Public Function **GetHashCode()** As **Integer**

C# public override **int GetHashCode();**

Managed C++ public: **int GetHashCode();**

JScript public override function **GetHashCode() : int;**

Return Value

System.Int32.

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op_Equality Method

Note: This documentation is preliminary and is subject to change.

Indicates that the two instances are equal.

Definition

```
Public Shared Function op_Equality( _
  ByVal a As SpeakMediaType, _
  ByVal b As SpeakMediaType _
) As Boolean
public static bool op_Equality(
  SpeakMediaType a,
  SpeakMediaType b
);
public: static bool op_Equality(
  SpeakMediaType a,
  SpeakMediaType b
);
public static function op_Equality(
  a : SpeakMediaType,
  b : SpeakMediaType
) : boolean;
```

Parameters

a `System.Speech.Synthesis.SpeakMediaType`.
b `System.Speech.Synthesis.SpeakMediaType`.

Return Value

`System.Boolean`.

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op_Inequality Method

Note: This documentation is preliminary and is subject to change.

Indicates that the two instances are not equal.

Definition

```
Public Shared Function op_Inequality( _
  ByVal a As SpeakMediaType, _
  ByVal b As SpeakMediaType _
```